Draft California 2014 Integrated Report (303(d) List/305(b) Report)
Supporting Information

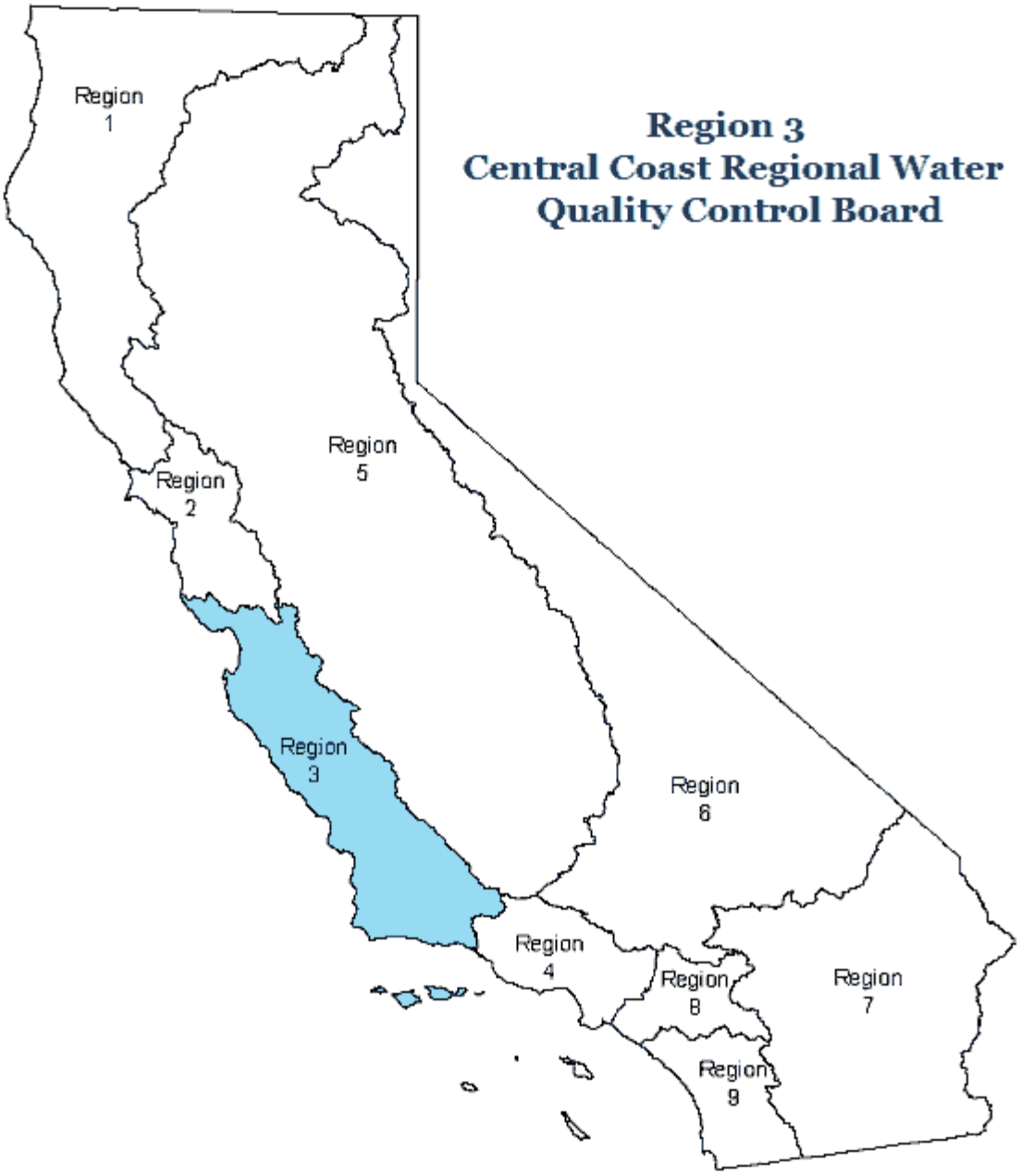

Draft

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

REGIONAL BOARD 3 - CENTRAL COAST REGION

- **New or Revised Fact Sheets**
  These lines of evidence and/or decisions, which were developed during the last listing cycle, are new or have been revised.
- **Original Fact Sheets**
  These lines of evidence and/or decisions were developed during the last listing cycle.

New or Revised Fact Sheets

Delist from 303(d) list (TMDL required list)	Regional Board 3

- **Blanco Drain**
  - Pesticides (34324)
- **Carnadero Creek (Uvas Creek below Bloomfield Road)**
  - pH (38207)
- **Carpinteria Creek**
  - Chlorpyrifos (41964)
  - Escherichia coli (E. coli) (37747)
  - Fecal Coliform (41957)
  - Oxygen, Dissolved (37828)
  - Sodium (38592)
- **Carpinteria Creek (below Gobernador Creek)**
  - Chlorpyrifos (50256)
- **Chorro Creek**
  - Oxygen, Dissolved (33489)
- **Chualar Creek**
  - Temperature, water (44621)
- **Franklin Creek (Santa Barbara County)**
  - Chlorpyrifos (39986)

Furlong Creek
  - Chlorpyrifos (39700)

- **Glen Annie Canyon**
  - Toxicity (42598)

- **Llagas Creek (below Chesbro Reservoir)**
  - pH (34758)

- **Main Street Channel**
  - pH (42193)

- **Millers Canal**
  - Chlorpyrifos (42160)

- **Monterey Harbor**
  - Metals (40992)

- **Moss Landing Harbor**
  - Pesticides (34527)

- **Nacimiento Reservoir**
  - Metals (44506)

- **Natividad Creek**
  - pH (41000)

- **Nipomo Creek**
  - Toxicity (41450)

- **Old Salinas River Estuary**
  - Fecal Coliform (32916)

- **Pacific Ocean at Avila Beach (Avila Pier)**
  - Enterococcus (36150)

- **Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)**
  - Total Coliform (44600)

- **Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)**
  - Enterococcus (36689)
  - Total Coliform (37524)

- **Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)**
  - Total Coliform (38442)

- **Pacific Ocean at Haskells Beach (Santa Barbara County)**
  - Enterococcus (39049)

- **Pacific Ocean at Jalama Beach (Santa Barbara County)**
  - Enterococcus (36627)

- **Pacific Ocean at Olde Port Beach (at restrooms)**
  - Enterococcus (37929)

- **Pacific Ocean at Point Rincon (mouth of Rincon Cr, Santa Barbara County)**
  - Fecal Coliform (33953)
  - Total Coliform (33954)

- **Pacific Ocean at Refugio Beach (Santa Barbara County)**
  - Enterococcus (38164)

- **Rincon Creek**
  - Turbidity (40643)

- **Salinas Reclamation Canal**
  - Pesticides (34005)

- **Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)**
  - Pesticides (34686)
  - Specific Conductivity (40214)

- **Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)**
  - Escherichia coli (E. coli) (40291)
  - Pesticides (34731)

- **Salinas River Lagoon (North)**
  - Pesticides (34389)

- **San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)**
  - Ammonia (39554)
  - Nitrogen, Nitrite (34027)

- **San Benito River**
  - Toxicity (39936)

- **San Lorenzo River**
  - Pathogens (44480)

- **San Luis Obispo Creek (above Osos Street)**
  - Fecal Coliform (38529)
  - Nitrate (34381)

- **San Luis Obispo Creek (below Osos Street)**
  - Chlorpyrifos (41885)

- **San Vicente Creek (Santa Cruz County)**
  - Sedimentation/Siltation (44336)

- **Santa Rosa Creek (San Luis Obispo County)**
  - Temperature, water (37489)

- **Soquel Creek**
  - Turbidity (39145)

- **Tecolotito Creek**
  - Toxicity (52677)

Tembladero Slough
  - Ammonia (33166)
  - Nutrients (32537)
  - Pesticides (32538)

- Toro Creek
  - Oxygen, Dissolved (37019)

- Valencia Creek
  - Pathogens (37606)

- Watsonville Slough
  - Pesticides (34296)

Delist from 303(d) list (being addressed by USEPA approved TMDL)	Regional Board 3

- Alisal Slough (Monterey County)
  - Oxygen, Dissolved (42946)

- Blanco Drain
  - Oxygen, Dissolved (36661)

- Clear Creek (San Benito County)
  - Mercury (37692)

- San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)
  - Chlorpyrifos (39170)

- San Luis Obispo Creek (below Osos Street)
  - Nutrients (34151)

- Santa Maria River
  - Ammonia (32592)

- Struve Slough
  - Pathogens (41907)

- Watsonville Slough
  - Pathogens (41903)

Do Not Delist from 303(d) list (TMDL required list)	Regional Board 3

- Alisal Slough (Monterey County)
  - Toxicity (42979)

- Aptos Creek
  - Sedimentation/Siltation (45635)

- Arroyo Burro Creek
  - Escherichia coli (E. coli) (36176)

    - Fecal Coliform (42377)

- **Arroyo De La Cruz Lagoon**
    - Oxygen, Dissolved (50984)

- **Arroyo Grande Creek (below Lopez Lake)**
    - Escherichia coli (E. coli) (36315)
    - Fecal Coliform (36935)

- **Arroyo Paredon**
    - Boron (33569)
    - Chloride (36968)
    - Fecal Coliform (36346)
    - Sodium (41661)

- **Arroyo Seco River**
    - Fecal Coliform (36371)
    - Temperature, water (37414)

- **Atascadero Creek (San Luis Obispo County)**
    - Escherichia coli (E. coli) (36871)
    - Fecal Coliform (32857)
    - Oxygen, Dissolved (32769)

- **Atascadero Creek (Santa Barbara County)**
    - Chloride (37460)
    - Escherichia coli (E. coli) (37279)
    - Fecal Coliform (37329)
    - Oxygen, Dissolved (37619)
    - Sodium (37594)
    - Temperature, water (37406)
    - pH (37133)

- **Bell Creek (Santa Barbara Co)**
    - Fecal Coliform (37420)
    - Toxicity (42980)

- **Bennett Slough**
    - Chlorophyll-a (37220)
    - Oxygen, Dissolved (37170)
    - pH (37343)

- **Blanco Drain**
    - Turbidity (42839)

- **Blosser Channel**
    - pH (36923)

- **Bradley Canyon Creek**
    - Turbidity (42976)
    - pH (38023)

- **Bradley Channel**
    - pH (37934)

- **Canada De La Gaviota**

    - Boron (33628)
    - Chloride (37387)
    - Escherichia coli (E. coli) (37323)
    - Fecal Coliform (37256)
    - Sodium (37155)

- **Canada Del Refugio**
    - Chloride (37706)
    - Fecal Coliform (37160)
    - Sodium (38103)

- **Carnadero Creek (Uvas Creek below Bloomfield Road)**
    - Nitrate (38141)
    - Oxygen, Dissolved (38161)
    - Turbidity (38312)

- **Carneros Creek (Monterey County)**
    - Ammonia (42988)
    - Chlorophyll-a (42279)
    - Fecal Coliform (42747)
    - Oxygen, Dissolved (42289)
    - Turbidity (42993)
    - pH (42828)

- **Carneros Creek (Santa Barbara County)**
    - Escherichia coli (E. coli) (38434)
    - pH (44571)

- **Carpinteria Creek (below Gobernador Creek)**
    - Escherichia coli (E. coli) (50224)
    - Fecal Coliform (50228)
    - Oxygen, Dissolved (50356)
    - Sodium (50348)

- **Chesbro Reservoir**
    - Mercury (41294)

- **Cholame Creek**
    - Chloride (38165)
    - Oxygen, Dissolved (38277)
    - Sodium (37981)
    - Specific Conductivity (38219)

- **Chorro Creek**
    - Escherichia coli (E. coli) (39043)

- **Chualar Creek**
    - Turbidity (38705)
    - pH (38706)

- **Cuyama River (above Twitchell Reservoir)**
    - Boron (43106)
    - Chloride (38489)
    - Sodium (38889)
    - Specific Conductivity (38856)
    - pH (38899)

- **Dairy Creek**
  - Oxygen, Dissolved (34663)

- **Devereux Creek**
  - Fecal Coliform (38647)
  - Oxygen, Dissolved (38712)

- **Dos Pueblos Canyon Creek**
  - Sodium (39431)

- **Elkhorn Slough**
  - Oxygen, Dissolved (39231)
  - Total Coliform (39469)
  - pH (38685)

- **Espinosa Slough**
  - Turbidity (40301)
  - pH (39566)

- **Estrella River**
  - pH (39746)

- **Franklin Creek (Santa Barbara County)**
  - Escherichia coli (E. coli) (39685)
  - Fecal Coliform (40432)
  - Nitrate (39128)
  - Sodium (40040)
  - pH (40206)

- **Gabilan Creek**
  - Turbidity (40095)
  - pH (40339)

- **Glen Annie Canyon Creek**
  - Toxicity (52676)

- **Greene Valley Creek (Santa Barbara County)**
  - Temperature, water (40363)
  - Turbidity (40430)

- **Llagas Creek (below Chesbro Reservoir)**
  - Oxygen, Dissolved (42223)
  - Specific Conductivity (42187)
  - Total Dissolved Solids (34760)
  - Turbidity (41996)

- **Los Osos Creek (Los Osos to Los Osos Creek Estuary)**
  - Oxygen, Dissolved (51400)

- **Los Osos Creek Estuary**
  - Oxygen, Dissolved (51399)

- **Main Street Channel**
  - Turbidity (42434)

- **Maria Ygnacio Creek**
  - Escherichia coli (E. coli) (44763)
  - Fecal Coliform (41540)
  - Sodium (42097)
  - pH (41438)

- **Merrit Ditch**
  - Turbidity (42084)

- **Millers Canal**
  - Chlorophyll-a (42039)
  - Oxygen, Dissolved (42216)
  - Temperature, water (42785)
  - Turbidity (42171)
  - pH (42172)

- **Mission Creek (Santa Barbara County)**
  - Escherichia coli (E. coli) (42180)
  - Fecal Coliform (41538)
  - Oxygen, Dissolved (42055)
  - Toxicity (41895)

- **Moro Cojo Slough**
  - Escherichia coli (E. coli) (42244)
  - Total Coliform (41902)
  - pH (41008)

- **Morro Bay**
  - Oxygen, Dissolved (33409)

- **Moss Landing Harbor**
  - Oxygen, Dissolved (41070)
  - pH (41130)

- **Nacimiento Reservoir**
  - Mercury (33120)

- **Natividad Creek**
  - Temperature, water (40971)
  - Turbidity (41039)

- **Old Salinas River**
  - Turbidity (41633)
  - pH (41704)

- **Orcutt Creek**
  - Boron (34570)
  - Chloride (41821)
  - Sodium (40960)
  - Specific Conductivity (40972)
  - Temperature, water (40961)
  - Turbidity (42426)

- **Oso Flaco Creek**
  - Chloride (41342)
  - Sodium (41675)

- **Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)**
  - Enterococcus (36328)
  - Total Coliform (34640)

- **Pacific Ocean at Avila Beach (SLO creek mouth)**
  - Enterococcus (37023)

- **Pacific Ocean at Capitola Beach (Santa Cruz County)**
  - Enterococcus (41513)
  - Fecal Coliform (41530)

- **Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)**
  - Fecal Coliform (44058)

- **Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)**
  - Enterococcus (37572)
  - Fecal Coliform (37280)
  - Total Coliform (34621)

- **Pacific Ocean at Goleta Beach (Santa Barbara County)**
  - Total Coliform (38527)

- **Pacific Ocean at Hammonds Beach (Santa Barbara County)**
  - Fecal Coliform (43433)
  - Total Coliform (36732)

- **Pacific Ocean at Hope Ranch Beach (Santa Barbara County)**
  - Fecal Coliform (43659)
  - Total Coliform (37563)

- **Pacific Ocean at Jalama Beach (Santa Barbara County)**
  - Fecal Coliform (36669)
  - Total Coliform (43209)

- **Pacific Ocean at Leadbetter Beach (Santa Barbara County)**
  - Total Coliform (38758)

- **Pacific Ocean at Ocean Beach (Santa Barbara County)**
  - Fecal Coliform (38424)
  - Total Coliform (38949)

- **Pacific Ocean at Refugio Beach (Santa Barbara County)**
  - Total Coliform (44486)

- **Pacific Ocean at Stillwater Cove Beach**
  - Enterococcus (44433)

- **Pajaro River**
  - Boron (33286)
  - Chlordane (44581)
  - Chloride (41646)
  - DDD (Dichlorodiphenyldichloroethane) (43484)
  - Dieldrin (41630)
  - Escherichia coli (E. coli) (41712)
  - Oxygen, Dissolved (41698)

    - PCBs (Polychlorinated biphenyls) (43120)
    - Sodium (41659)
    - Turbidity (41758)
    - pH (41770)

- **Pico Creek**
    - Oxygen, Dissolved (41218)

- **Pinto Lake**
    - Oxygen, Dissolved (40904)

- **Pismo Creek**
    - Chloride (40742)
    - Escherichia coli (E. coli) (40845)
    - Fecal Coliform (40163)
    - Oxygen, Dissolved (40871)
    - Sodium (40022)

- **Prefumo Creek**
    - Fecal Coliform (40805)
    - Oxygen, Dissolved (40594)
    - Turbidity (40663)

- **Quail Creek**
    - Temperature, water (44475)
    - Turbidity (40802)

- **Rincon Creek**
    - Boron (33246)
    - Chloride (42842)
    - Escherichia coli (E. coli) (40784)
    - Fecal Coliform (40865)
    - Sodium (40705)
    - Toxicity (33571)

- **Romero Creek**
    - pH (40691)

- **Salinas Reclamation Canal**
    - Turbidity (40698)
    - pH (40469)

- **Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)**
    - Chlordane (43083)
    - Chloride (39652)
    - DDT (Dichlorodiphenyltrichloroethane) (43258)
    - Dieldrin (40271)
    - PCBs (Polychlorinated biphenyls) (43483)
    - Sodium (40860)
    - Total Dissolved Solids (40720)
    - Turbidity (40733)
    - pH (40726)

- **Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)**
    - Fecal Coliform (40336)
    - Temperature, water (39367)
    - Toxicity (40070)

    - Turbidity (39717)
    - pH (39380)

- **Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)**
    - Chloride (33359)
    - Sodium (44574)
    - pH (40274)

- **Salsipuedes Creek (Santa Barbara County)**
    - Chloride (39491)
    - Sodium (39259)

- **Salsipuedes Creek (Santa Cruz County)**
    - Oxygen, Dissolved (39294)
    - Turbidity (39987)
    - pH (39490)

- **San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)**
    - Boron (34026)
    - Chloride (39215)
    - Escherichia coli (E. coli) (39567)
    - Fecal Coliform (39568)
    - Oxygen, Dissolved (39999)
    - Sodium (39095)

- **San Antonio Reservoir**
    - Mercury (40437)

- **San Benito River**
    - Specific Conductivity (39890)
    - pH (39161)

- **San Jose Creek (Santa Barbara County)**
    - Chloride (38305)
    - Escherichia coli (E. coli) (40016)
    - Fecal Coliform (39919)
    - Sodium (39982)
    - Specific Conductivity (39990)
    - pH (39818)

- **San Juan Creek (San Benito County)**
    - Nitrate (38026)
    - Oxygen, Dissolved (38280)
    - Toxicity (44655)
    - Turbidity (38588)

- **San Lorenzo Creek (Monterey County)**
    - Boron (32642)
    - Chloride (38242)
    - Sodium (38171)
    - Specific Conductivity (37842)
    - pH (37861)

- **San Luis Obispo Creek (below Osos Street)**
    - Chloride (38438)
    - Sodium (38195)

- **San Miguelito Creek**
  - Chloride (38465)
  - Sodium (37841)
  - Temperature, water (37873)
  - pH (37641)

- **San Pedro Creek (Santa Barbara County)**
  - Escherichia coli (E. coli) (37762)
  - Fecal Coliform (37763)
  - Sodium (37720)
  - Temperature, water (37801)
  - pH (38510)

- **San Simeon Creek**
  - Chloride (44452)
  - Nitrate (38313)
  - Oxygen, Dissolved (37866)
  - Sodium (37869)

- **Santa Maria River**
  - Chloride (38160)
  - Sodium (38205)
  - Turbidity (38823)

- **Santa Monica Creek**
  - Fecal Coliform (37236)
  - pH (37693)

- **Santa Rita Creek (Monterey County)**
  - Sodium (37391)
  - Turbidity (38774)

- **Santa Ynez River (Cachuma Lake to below city of Lompoc)**
  - Sodium (37971)
  - Temperature, water (37936)

- **Santa Ynez River (below city of Lompoc to Ocean)**
  - Chloride (38060)
  - Escherichia coli (E. coli) (37645)
  - Fecal Coliform (37644)
  - Nitrate (33141)
  - Oxygen, Dissolved (37729)
  - Sodium (37175)
  - Temperature, water (38014)

- **Struve Slough**
  - Oxygen, Dissolved (37054)
  - pH (37108)

- **Sycamore Creek**
  - Chloride (37034)
  - Fecal Coliform (36867)
  - Sodium (37445)

- **Tecolote Creek (Santa Barbara County)**
  - Chloride (36619)

Sodium (36646)

- **Tecolotito Creek**
  - Chloride (52651)
  - Escherichia coli (E. coli) (52716)
  - Fecal Coliform (52672)
  - Sodium (52570)

- **Tembladero Slough**
  - Toxicity (39116)
  - Turbidity (39813)
  - pH (36784)

- **Tequisquita Slough**
  - Oxygen, Dissolved (36857)
  - Turbidity (39289)
  - pH (44853)

- **Toro Canyon Creek**
  - Fecal Coliform (44854)

- **Toro Creek**
  - Fecal Coliform (36825)

- **Tularcitos Creek**
  - Chloride (36816)
  - Sodium (36982)

- **Uvas Reservoir**
  - Mercury (39705)

- **Warden Creek**
  - Fecal Coliform (32865)
  - Oxygen, Dissolved (36742)

- **Watsonville Creek**
  - Escherichia coli (E. coli) (36734)
  - Fecal Coliform (36903)
  - Nitrate (37285)
  - Oxygen, Dissolved (37109)
  - pH (37454)

- **Watsonville Slough**
  - Oxygen, Dissolved (36957)
  - Turbidity (38573)

Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)	Regional Board 3

- **Alamo Creek**
  - Fecal Coliform (32502)

- **Alisal Creek (Monterey County)**
  - Chlorophyll-a (41650)

Fecal Coliform (32858)
  - Nitrate (46348)

- **Alisal Slough (Monterey County)**
  - Nitrate (44072)

- **Aptos Creek**
  - Indicator Bacteria (42840)

- **Arroyo De La Cruz Lagoon**
  - Escherichia coli (E. coli) (50941)

- **Arroyo Paredon**
  - Diazinon (41441)
  - Nitrate (33570)
  - Toxicity (33218)

- **Bean Creek**
  - Sedimentation/Siltation (34546)

- **Bear Creek(Santa Cruz County)**
  - Sedimentation/Siltation (34433)

- **Bell Creek (Santa Barbara Co)**
  - Nitrate (33784)

- **Blanco Drain**
  - Chlorpyrifos (41507)
  - Diazinon (42385)
  - Nitrate (42367)

- **Blosser Channel**
  - Ammonia (32519)
  - Fecal Coliform (38045)
  - Nitrate (36616)
  - Toxicity (42940)

- **Boulder Creek**
  - Sedimentation/Siltation (34325)

- **Bradley Canyon Creek**
  - Ammonia (32387)
  - Fecal Coliform (32915)
  - Nitrate (42308)
  - Oxygen, Dissolved (37830)
  - Toxicity (42899)

- **Bradley Channel**
  - Ammonia (37664)
  - Chlorpyrifos (42868)
  - Fecal Coliform (32386)
  - Nitrate (33689)
  - Toxicity (42937)

- **Branciforte Creek**
  - Sedimentation/Siltation (34326)

- **Carbonera Creek**
  - Indicator Bacteria (41844)
  - Sedimentation/Siltation (34328)

- **Carneros Creek (Santa Barbara County)**
  - Nitrate (42740)

- **Cholame Creek**
  - Boron (37785)
  - Escherichia coli (E. coli) (38372)
  - Fecal Coliform (32385)

- **Chorro Creek**
  - Fecal Coliform (38376)
  - Nutrients (38667)

- **Chualar Creek**
  - Ammonia (38870)
  - Nitrate (38998)
  - Toxicity (41927)

- **Chualar Creek, South Branch**
  - Nitrate (39924)

- **Corralitos Creek**
  - Fecal Coliform (38814)

- **Cuyama River (above Twitchell Reservoir)**
  - Fecal Coliform (38873)

- **Espinosa Slough**
  - Ammonia (39653)
  - Diazinon (42013)
  - Nitrate (42356)
  - Toxicity (41868)

- **Fall Creek**
  - Sedimentation/Siltation (33971)

- **Gabilan Creek**
  - Ammonia (40319)
  - Fecal Coliform (40216)
  - Nitrate (33631)
  - Toxicity (41908)

- **Glen Annie Canyon Creek**
  - Nitrate (52689)

- **Greene Valley Creek (Santa Barbara County)**
  - Ammonia (39669)
  - Chlorpyrifos (39624)
  - Nitrate (39643)
  - Oxygen, Dissolved (39642)
  - Toxicity (42640)

- **Hernandez Reservoir**
  - Mercury (33572)

- **Jalama Creek**
  - Chloride (41687)
  - Sodium (41197)

- **Kings Creek**
  - Sedimentation/Siltation (34053)

- **Little Oso Flaco Creek**
  - Fecal Coliform (40963)
  - Nitrate (42048)
  - Toxicity (44834)

- **Llagas Creek (below Chesbro Reservoir)**
  - Fecal Coliform (41498)
  - Nitrate (42219)
  - Sedimentation/Siltation (34587)

- **Lompico Creek**
  - Fecal Coliform (42365)
  - Nitrate (42277)

- **Los Berros Creek**
  - Nitrate (41514)

- **Los Osos Creek (Los Osos to Los Osos Creek Estuary)**
  - Nitrate (51386)

- **Los Osos Creek Estuary**
  - Nitrate (51392)

- **Main Street Channel**
  - Ammonia (33068)
  - Chlorpyrifos (42138)
  - Diazinon (42139)
  - Fecal Coliform (42090)
  - Nitrate (32407)
  - Toxicity (42236)

- **Merrit Ditch**
  - Ammonia (42068)
  - Nitrate (42293)
  - Oxygen, Dissolved (42045)
  - Toxicity (41841)

- **Moro Cojo Slough**
  - Ammonia (33107)
  - Oxygen, Dissolved (32590)

- **Moss Landing Harbor**
  - Chlorpyrifos (41075)
  - Diazinon (41028)

- **Natividad Creek**
  - Ammonia (41012)
  - Nitrate (33924)
  - Oxygen, Dissolved (41137)
  - Toxicity (41525)

- **Nipomo Creek**
  - Fecal Coliform (32514)
  - Nitrate (42372)

- **Old Salinas River**
  - Chlorophyll-a (41651)
  - Chlorpyrifos (41735)
  - Diazinon (41682)
  - Escherichia coli (E. coli) (34163)
  - Fecal Coliform (41362)
  - Nitrate (42984)
  - Oxygen, Dissolved (41466)
  - Toxicity (44496)

- **Orcutt Creek**
  - Ammonia (32657)
  - Chlorpyrifos (32690)
  - DDT (Dichlorodiphenyltrichloroethane) (32635)
  - Diazinon (41356)
  - Dieldrin (32702)
  - Fecal Coliform (32564)
  - Nitrate (41631)
  - Toxicity (41473)

- **Oso Flaco Creek**
  - Ammonia (33355)
  - Fecal Coliform (41794)
  - Nitrate (42933)
  - Toxicity (44791)

- **Oso Flaco Lake**
  - Dieldrin (33369)
  - Nitrate (43630)

- **Pajaro River**
  - Chlorpyrifos (41723)
  - Fecal Coliform (41246)
  - Nitrate (41308)

- **Prefumo Creek**
  - Nitrate (41353)

- **Quail Creek**
  - Ammonia (40541)
  - Chlorpyrifos (40822)
  - Diazinon (40823)
  - Escherichia coli (E. coli) (40709)
  - Fecal Coliform (40826)
  - Nitrate (33776)
  - Oxygen, Dissolved (40879)
  - Toxicity (41597)

- **Salinas Reclamation Canal**
  - Ammonia (33126)
  - Chlorpyrifos (41512)
  - Diazinon (44681)
  - Escherichia coli (E. coli) (40804)
  - Fecal Coliform (32698)
  - Nitrate (42708)
  - Oxygen, Dissolved (40832)
  - Toxicity (40697)

- **Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)**
  - Chlorpyrifos (39577)
  - Diazinon (40455)
  - Escherichia coli (E. coli) (40607)
  - Fecal Coliform (44640)
  - Nitrate (42934)
  - Toxicity (40766)

- **Salsipuedes Creek (Santa Cruz County)**
  - Escherichia coli (E. coli) (39967)

- **San Antonio River (below San Antonio Reservoir)**
  - Escherichia coli (E. coli) (39191)
  - Fecal Coliform (39204)

- **San Benito River**
  - Fecal Coliform (32588)

- **San Lorenzo Creek (Monterey County)**
  - Escherichia coli (E. coli) (37855)
  - Fecal Coliform (32403)

- **San Lorenzo River**
  - Nitrate (38343)
  - Sedimentation/Siltation (32395)

- **San Luis Obispo Creek (below Osos Street)**
  - Fecal Coliform (42461)
  - Nitrate (35128)

- **Santa Maria River**
  - Chlorpyrifos (32721)
  - DDT (Dichlorodiphenyltrichloroethane) (33393)
  - Dieldrin (32806)
  - Endrin (33137)
  - Escherichia coli (E. coli) (38501)
  - Fecal Coliform (32755)
  - Nitrate (32526)
  - Toxicity (39330)

- **Santa Rita Creek (Monterey County)**
  - Ammonia (38629)
  - Escherichia coli (E. coli) (37513)
  - Fecal Coliform (37149)
  - Nitrate (33080)
  - Oxygen, Dissolved (37150)

- **Shingle Mill Creek**
  - Sedimentation/Siltation (34448)

- **Soquel Creek**
  - Escherichia coli (E. coli) (36829)
  - Fecal Coliform (36928)

- **Stenner Creek**
  - Fecal Coliform (36645)

- **Tecolotito Creek**
  - Nitrate (52706)

- **Tembladero Slough**
  - Chlorophyll-a (39521)
  - Chlorpyrifos (42573)
  - Diazinon (42561)
  - Escherichia coli (E. coli) (37630)
  - Fecal Coliform (33543)
  - Nitrate (42856)
  - Total Coliform (37404)

- **Tequisquita Slough**
  - Fecal Coliform (33537)

- **Warden Creek**
  - Nitrate (37458)

- **Zayante Creek**
  - Sedimentation/Siltation (34297)

Do Not List on 303(d) list (TMDL required list)	Regional Board 3

- **Alamo Creek**
  - Ammonia (36329)
  - Benthic Community Effects (46597)
  - Boron (36709)
  - Chloride (36164)
  - Chlorophyll-a (41481)
  - Escherichia coli (E. coli) (46598)
  - Nitrate (36527)
  - Nitrogen, Nitrite (46599)
  - Oxygen, Dissolved (36991)
  - Sodium (41485)
  - Specific Conductivity (36526)
  - Temperature, water (37234)
  - Turbidity (41526)
  - pH (36410)

- **Alisal Creek (Monterey County)**
  - Oxygen, Dissolved (36300)
  - Specific Conductivity (46602)
  - Temperature, water (46603)
  - pH (46606)

- **Alisal Slough (Monterey County)**
  - Chlorophyll-a (42908)
  - Chlorpyrifos (42966)
  - Demeton (46608)
  - Dichlorvos (46609)
  - Dimethoate (46610)
  - Disulfoton (46611)
  - Ethoprop (46612)
  - Malathion (46613)
  - Methyl Parathion (46614)
  - Phorate (46615)
  - Temperature, water (46616)
  - pH (42313)

- **Aptos Creek**
  - Ammonia (36966)
  - Boron (36703)
  - Chloride (36650)
  - Chlorophyll-a (41457)
  - Nitrate (36498)
  - Nitrogen, Nitrite (53536)
  - Oxygen, Dissolved (45796)
  - Sodium (45636)
  - Specific Conductivity (45637)
  - Temperature, water (37077)
  - Turbidity (36959)
  - pH (36969)

- **Arroyo Burro Creek**
  - Ammonia (36901)
  - Benthic Community Effects (52459)
  - Chlorophyll-a (41547)
  - Chlorpyrifos (41773)
  - Diazinon (41822)
  - Nitrate (36446)
  - Toxicity (42997)
  - Turbidity (41608)
  - pH (36224)

- **Arroyo De La Cruz Lagoon**
  - Ammonia (50994)
  - Boron (50947)
  - Chloride (50945)
  - Chlorophyll-a (50963)
  - Fecal Coliform (50936)
  - Nitrate (50982)
  - Nitrogen, Nitrite (52122)
  - Sodium (50995)
  - Specific Conductivity (50969)
  - Temperature, water (50940)
  - Turbidity (50988)
  - pH (50978)

- **Arroyo Grande Creek (below Lopez Lake)**
  - Ammonia (36155)
  - Arsenic (36270)
  - Azinphos-methyl (Guthion) (46620)
  - Bifenthrin (46622)

- Boron (36566)
- Cadmium (36453)
- Chlordane (46623)
- Chloride (46625)
- Chlorophyll-a (41557)
- Chlorpyrifos (41534)
- Chromium (36399)
- Copper (36372)
- Cyfluthrin (46624)
- Cyhalothrin, Lambda (46626)
- Cypermethrin (46627)
- DDD (Dichlorodiphenyldichloroethane) (53604)
- DDE (Dichlorodiphenyldichloroethylene) (53605)
- DDT (Dichlorodiphenyltrichloroethane) (46628)
- Deltamethrin (46629)
- Demeton (46630)
- Diazinon (41545)
- Dichlorvos (46631)
- Dieldrin (41555)
- Dimethoate (46632)
- Disulfoton (46633)
- Endrin (41556)
- Esfenvalerate/Fenvalerate (46634)
- Ethoprop (46635)
- Fenpropathrin (46636)
- Lead (36567)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (46637)
- Malathion (46638)
- Mercury (36412)
- Methidathion (46639)
- Methyl Parathion (46640)
- Nitrogen, Nitrite (46641)
- Oxygen, Dissolved (38332)
- PCBs (Polychlorinated biphenyls) (46642)
- Parathion (46643)
- Permethrin, total (46644)
- Phorate (46645)
- Phosmet (46646)
- Sodium (46647)
- Specific Conductivity (36568)
- Temperature, water (37089)
- Total Dissolved Solids (46648)
- Turbidity (41398)
- Zinc (36344)
- pH (36464)

- **Arroyo Paredon**
  - Ammonia (36239)
  - Azinphos-methyl (Guthion) (46649)
  - Chlorophyll-a (41405)
  - Chlorpyrifos (41451)
  - Demeton (46650)
  - Dichlorvos (46651)
  - Dimethoate (46652)
  - Disulfoton (46653)
  - Ethoprop (46654)
  - Malathion (46655)
  - Methidathion (46656)
  - Methyl Parathion (46657)
  - Nitrogen, Nitrite (46662)

- Oxygen, Dissolved (37116)
- Parathion (46658)
- Phorate (46659)
- Phosmet (46660)
- Specific Conductivity (36891)
- Turbidity (41662)
- pH (36254)

- **Arroyo Seco River**
  - Alkalinity as CaCO3 (46672)
  - Ammonia (36177)
  - Benthic Community Effects (46673)
  - Boron (36222)
  - Chloride (36846)
  - Chlorophyll-a (41718)
  - Escherichia coli (E. coli) (36165)
  - Nitrate (36918)
  - Nitrogen, Nitrite (46674)
  - Oxygen, Dissolved (36911)
  - Sodium (37218)
  - Specific Conductivity (37284)
  - Turbidity (37274)
  - pH (37418)

- **Atascadero Creek (San Luis Obispo County)**
  - Ammonia (37114)
  - Benthic Community Effects (46789)
  - Boron (36870)
  - Chloride (36789)
  - Chlorophyll-a (41719)
  - Nitrate (36751)
  - Nitrogen, Nitrite (46790)
  - PCBs (Polychlorinated biphenyls) (46791)
  - Sodium (37567)
  - Specific Conductivity (36726)
  - Temperature, water (37568)
  - Turbidity (41544)
  - pH (36930)

- **Atascadero Creek (Santa Barbara County)**
  - Ammonia (37543)
  - Arsenic (36657)
  - Bifenthrin (46803)
  - Boron (36658)
  - Cadmium (37549)
  - Chlordane (46804)
  - Chlorophyll-a (41553)
  - Chlorpyrifos (41385)
  - Chromium (36855)
  - Copper (36648)
  - Cyfluthrin (46805)
  - Cyhalothrin, Lambda (46806)
  - Cypermethrin (46807)
  - DDD (Dichlorodiphenyldichloroethane) (46808)
  - DDE (Dichlorodiphenyldichloroethylene) (46809)
  - DDT (Dichlorodiphenyltrichloroethane) (46810)
  - Deltamethrin (46811)
  - Diazinon (44203)
  - Dieldrin (41571)

Endrin (41572)
- Esfenvalerate/Fenvalerate (46812)
- Fenpropathrin (46813)
- Lead (34128)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (46814)
- Mercury (37295)
- Methyl Parathion (46815)
- Nickel (37282)
- Nitrogen, Nitrite (46816)
- Permethrin, total (46817)
- Specific Conductivity (36840)
- Turbidity (41559)
- Zinc (37049)

- **Bean Creek**
  - Temperature, water (36687)

- **Bear Creek(Santa Cruz County)**
  - Ammonia (36234)
  - Temperature, water (41419)

- **Bell Creek (Santa Barbara Co)**
  - Ammonia (37409)
  - Azinphos-methyl (Guthion) (46847)
  - Chlorophyll-a (41591)
  - Chlorpyrifos (41396)
  - Demeton (46848)
  - Diazinon (41446)
  - Dichlorvos (46849)
  - Dimethoate (46850)
  - Disulfoton (46851)
  - Escherichia coli (E. coli) (46852)
  - Ethoprop (46853)
  - Malathion (46854)
  - Methidathion (46855)
  - Methyl Parathion (46856)
  - Oxygen, Dissolved (36810)
  - Parathion (46857)
  - Phorate (46872)
  - Phosmet (46873)
  - Temperature, water (37470)
  - Turbidity (41465)
  - pH (37429)

- **Bennett Slough**
  - Nitrate (46874)
  - Temperature, water (37275)

- **Betteravia Lakes**
  - Ammonia (32570)

- **Big Creek (Big Sur Coast)**
  - Ammonia (36830)
  - Benthic Community Effects (46875)
  - Chlorophyll-a (41495)
  - Escherichia coli (E. coli) (37093)
  - Fecal Coliform (36907)
  - Nitrate (36690)

- Oxygen, Dissolved (37589)
- Temperature, water (37403)
- Turbidity (41720)

- **Big Sur River**
  - Ammonia (37586)
  - Benthic Community Effects (46876)
  - Boron (37599)
  - Chloride (46877)
  - Chlorophyll-a (41550)
  - Escherichia coli (E. coli) (37433)
  - Fecal Coliform (37450)
  - Nitrate (37451)
  - Nitrogen, Nitrite (46878)
  - Oxygen, Dissolved (36617)
  - Sodium (46879)
  - Specific Conductivity (37415)
  - Temperature, water (36827)
  - Total Dissolved Solids (46880)
  - Toxicity (46895)
  - Turbidity (41551)
  - pH (37511)

- **Blanco Drain**
  - Alachlor (46917)
  - Ammonia (36615)
  - Atrazine (46918)
  - Bifenthrin (46942)
  - Butylate (46935)
  - Carbaryl (46919)
  - Carbofuran (46920)
  - Chlorophyll-a (40409)
  - Cyfluthrin (46943)
  - Cyhalothrin, Lambda (46944)
  - Cypermethrin (46945)
  - DDT (Dichlorodiphenyltrichloroethane) (46948)
  - Deltamethrin (46921)
  - Demeton (46950)
  - Dichlorvos (46951)
  - Dimethoate (46952)
  - Dyfonate (Fonofos or Fonophos) (46955)
  - Esfenvalerate/Fenvalerate (46922)
  - Ethalfluralin (46924)
  - Ethoprop (46953)
  - Fenamiphos (46936)
  - Fenpropathrin (46923)
  - Fipronil (46956)
  - Fipronil Sulfide (65737)
  - Fipronil Sulfone (65738)
  - Hexazinone (46926)
  - Malathion (46957)
  - Methidathion (46954)
  - Methyl Parathion (46949)
  - Molinate (46925)
  - Napropamide (46927)
  - Permethrin, total (46958)
  - Phorate (46959)
  - Phosmet (46931)
  - Prometryn (46933)
  - Propanil (DCPA mono- and di-acid degrad) (46928)

- Propiconazole (46929)
- Simazine (46930)
- Thiobencarb/Bolero (46932)
- Trifluralin (46934)
- pH (36922)

- **Blosser Channel**
  - Azinphos-methyl (Guthion) (46960)
  - Bifenthrin (46975)
  - Chlordane (46983)
  - Chlorophyll-a (42901)
  - Cyfluthrin (46978)
  - Cyhalothrin, Lambda (46979)
  - Cypermethrin (46977)
  - DDD (Dichlorodiphenyldichloroethane) (46972)
  - DDE (Dichlorodiphenyldichloroethylene) (46973)
  - DDT (Dichlorodiphenyltrichloroethane) (46974)
  - Deltamethrin (46980)
  - Demeton (46961)
  - Dichlorvos (46962)
  - Dieldrin (46984)
  - Dimethoate (46963)
  - Disulfoton (46988)
  - Endrin (46985)
  - Escherichia coli (E. coli) (46966)
  - Esfenvalerate/Fenvalerate (46981)
  - Ethoprop (46964)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (46986)
  - Malathion (46967)
  - Methidathion (46969)
  - Methyl Parathion (46982)
  - Oxygen, Dissolved (36631)
  - PCBs (Polychlorinated biphenyls) (46987)
  - Parathion (46965)
  - Permethrin, total (46976)
  - Phorate (46968)
  - Phosmet (46970)

- **Boulder Creek**
  - Ammonia (37956)
  - Temperature, water (38128)

- **Bradley Canyon Creek**
  - Chlorophyll-a (37832)
  - Demeton (46994)
  - Diazinon (46916)
  - Dichlorvos (46995)
  - Dimethoate (46990)
  - Disulfoton (46996)
  - Escherichia coli (E. coli) (46989)
  - Ethoprop (46997)
  - Malathion (46991)
  - Methyl Parathion (46992)
  - Phorate (46993)

- **Bradley Channel**
  - Azinphos-methyl (Guthion) (47013)
  - Bifenthrin (47006)
  - Chlordane (47001)

- Chlorophyll-a (42837)
- Cyfluthrin (47007)
- Cyhalothrin, Lambda (47008)
- Cypermethrin (47009)
- DDD (Dichlorodiphenyldichloroethane) (46998)
- DDE (Dichlorodiphenyldichloroethylene) (46999)
- DDT (Dichlorodiphenyltrichloroethane) (47000)
- Deltamethrin (47010)
- Demeton (47014)
- Dichlorvos (47015)
- Dieldrin (47002)
- Dimethoate (47016)
- Disulfoton (47017)
- Endrin (47003)
- Esfenvalerate/Fenvalerate (47316)
- Ethoprop (47018)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (47004)
- Methidathion (47318)
- Methyl Parathion (47317)
- Oxygen, Dissolved (37311)
- PCBs (Polychlorinated biphenyls) (47012)
- Parathion (47021)
- Permethrin, total (47011)
- Phorate (47020)
- Phosmet (47022)
- Temperature, water (38084)

- **Branciforte Creek**
  - Temperature, water (37207)

- **Cachuma, Lake**
  - Aldrin (47023)
  - Chlordane (47024)
  - DDT (Dichlorodiphenyltrichloroethane) (47030)
  - Dieldrin (47025)
  - Endrin (47026)
  - Heptachlor (47032)
  - Heptachlor epoxide (47027)
  - Hexachlorobenzene/ HCB (47033)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (47028)
  - Mirex (47035)
  - PCBs (Polychlorinated biphenyls) (47029)
  - Selenium (47036)
  - alpha-Endosulfan (Endosulfan 1) (47031)

- **Canada De La Gaviota**
  - Ammonia (37551)
  - Benthic Community Effects (47037)
  - Chlorophyll-a (42826)
  - Chlorpyrifos (42875)
  - Diazinon (42876)
  - Nitrate (37257)
  - Nitrogen, Nitrite (53537)
  - Oxygen, Dissolved (37273)
  - Specific Conductivity (37942)
  - Temperature, water (37491)
  - Toxicity (42823)
  - Turbidity (42825)
  - pH (38013)

- **Canada Del Capitan**
  - Ammonia (38037)
  - Benthic Community Effects (47054)
  - Boron (38008)
  - Chloride (37379)
  - Chlorophyll-a (41904)
  - Escherichia coli (E. coli) (47055)
  - Fecal Coliform (38004)
  - Nitrate (37994)
  - Nitrogen, Nitrite (53538)
  - Oxygen, Dissolved (37368)
  - Sodium (37888)
  - Specific Conductivity (38009)
  - Temperature, water (37889)
  - Turbidity (41905)
  - pH (38030)

- **Canada Del Refugio**
  - Ammonia (37380)
  - Benthic Community Effects (47058)
  - Boron (38087)
  - Chlorophyll-a (40559)
  - Escherichia coli (E. coli) (47059)
  - Nitrate (37161)
  - Nitrogen, Nitrite (53539)
  - Oxygen, Dissolved (37962)
  - Specific Conductivity (37954)
  - Temperature, water (38104)
  - Toxicity (41951)
  - Turbidity (41856)
  - pH (38042)

- **Canyon Del Rey (Monterey County)**
  - Bifenthrin (47060)
  - Chlordane (47068)
  - Chlorpyrifos (47076)
  - Cyfluthrin (47061)
  - Cyhalothrin, Lambda (47062)
  - Cypermethrin (47063)
  - DDD (Dichlorodiphenyldichloroethane) (47069)
  - DDE (Dichlorodiphenyldichloroethylene) (47070)
  - DDT (Dichlorodiphenyltrichloroethane) (47071)
  - Deltamethrin (47064)
  - Diazinon (47077)
  - Dieldrin (47072)
  - Endrin (47073)
  - Esfenvalerate/Fenvalerate (47065)
  - Fenpropathrin (47066)
  - Fipronil (47078)
  - Fipronil Sulfide (47079)
  - Fipronil Sulfone (47080)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (47074)
  - Permethrin, total (47067)
  - Toxicity (47081)

- **Carbonera Creek**
  - Temperature, water (37477)

Carmel River

- Alkalinity as CaCO3 (47082)
- Ammonia (37183)
- Arsenic (37412)
- Benthic Community Effects (47083)
- Bifenthrin (47084)
- Boron (42480)
- Cadmium (37362)
- Chlordane (47085)
- Chloride (47099)
- Chlorophyll-a (42634)
- Chlorpyrifos (42645)
- Chromium (37363)
- Copper (37591)
- Cyfluthrin (47087)
- Cyhalothrin, Lambda (47088)
- Cypermethrin (47089)
- DDD (Dichlorodiphenyldichloroethane) (47094)
- DDE (Dichlorodiphenyldichloroethylene) (47095)
- DDT (Dichlorodiphenyltrichloroethane) (47096)
- Deltamethrin (47090)
- Diazinon (42471)
- Dieldrin (41867)
- Endrin (41858)
- Escherichia coli (E. coli) (37776)
- Esfenvalerate/Fenvalerate (47091)
- Fecal Coliform (37833)
- Fenpropathrin (47092)
- Flow alterations (64348)
- Lead (37421)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (47093)
- Mercury (37466)
- Methyl Parathion (47097)
- Nickel (38228)
- Nitrate (38229)
- Nitrogen, Nitrite (47101)
- Oxygen, Dissolved (38121)
- PCBs (Polychlorinated biphenyls) (47100)
- Permethrin, total (47098)
- Sodium (47102)
- Specific Conductivity (37879)
- Temperature, water (37920)
- Total Dissolved Solids (47104)
- Toxicity (41843)
- Turbidity (42641)
- Zinc (37238)
- pH (38112)

- **Carnadero Creek (Uvas Creek below Bloomfield Road)**
  - Ammonia (38150)
  - Chlorophyll-a (40264)
  - Temperature, water (38515)
  - Toxicity (41837)

- **Carneros Creek (Monterey County)**
  - Escherichia coli (E. coli) (42996)
  - Temperature, water (42890)

- **Carneros Creek (Santa Barbara County)**

- Ammonia (42704)
- Chlorophyll-a (42254)
- Oxygen, Dissolved (42706)
- Temperature, water (42690)
- Turbidity (42691)

- **Carpinteria Creek**
  - Ammonia (37675)
  - Boron (38302)
  - Chloride (41833)
  - Chlorophyll-a (41834)
  - Diazinon (41965)
  - Specific Conductivity (37683)
  - Temperature, water (37744)
  - Toxicity (41875)
  - Turbidity (38274)
  - pH (38286)

- **Carpinteria Creek (below Gobernador Creek)**
  - Ammonia (50413)
  - Benthic Community Effects (50364)
  - Boron (50315)
  - Chlorophyll-a (50425)
  - Diazinon (50270)
  - Nitrogen, Nitrite (50706)
  - Specific Conductivity (50390)
  - Temperature, water (50321)
  - Turbidity (50269)
  - pH (50412)

- **Cayucos Creek**
  - Ammonia (38348)
  - Benthic Community Effects (47159)
  - Boron (38038)
  - Chloride (37847)
  - Chlorophyll-a (41985)
  - Escherichia coli (E. coli) (47160)
  - Fecal Coliform (38189)
  - Nitrate (38040)
  - Nitrogen, Nitrite (53540)
  - Oxygen, Dissolved (37759)
  - Sodium (38287)
  - Specific Conductivity (38203)
  - Temperature, water (37922)
  - Turbidity (38071)
  - pH (38576)

- **Chalone Creek**
  - Alkalinity as CaCO3 (47161)
  - Ammonia (47164)
  - Benthic Community Effects (47166)
  - Chloride (47162)
  - Nitrogen, Nitrite (53541)
  - Oxygen, Dissolved (47163)
  - Specific Conductivity (38578)
  - pH (47165)

- **Chesbro Reservoir**
  - Aldrin (51295)

- Chlordane (51298)
- DDT (Dichlorodiphenyltrichloroethane) (51310)
- Dieldrin (51299)
- Endrin (51300)
- Heptachlor (51301)
- Heptachlor epoxide (51302)
- Hexachlorobenzene/ HCB (51303)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51304)
- Mirex (51306)
- PCBs (Polychlorinated biphenyls) (51308)
- Selenium (51309)
- alpha-Endosulfan (Endosulfan 1) (51311)

- **Cholame Creek**
  - Ammonia (38064)
  - Chlorophyll-a (38298)
  - Nitrate (37859)
  - Nitrogen, Nitrite (53542)
  - Turbidity (37895)
  - pH (38371)

- **Chorro Creek**
  - Ammonia (38877)
  - Boron (38542)
  - Chlorophyll-a (38415)
  - Chlorpyrifos (41945)
  - Diazinon (41946)
  - Nitrogen, Nitrite (53543)
  - Specific Conductivity (38763)
  - Temperature, water (38552)
  - Turbidity (38479)
  - pH (38386)

- **Chualar Creek**
  - Bifenthrin (47179)
  - Chlorophyll-a (39063)
  - Cyfluthrin (47180)
  - Cyhalothrin, Lambda (47181)
  - Cypermethrin (47182)
  - Dichlorvos (47184)
  - Disulfoton (47186)
  - Dyfonate (Fonofos or Fonophos) (47187)
  - Esfenvalerate/Fenvalerate (47188)
  - Ethoprop (47189)
  - Fenamiphos (47190)
  - Methidathion (47192)
  - Methyl Parathion (47193)
  - Permethrin, total (47183)
  - Phorate (47194)

- **Chualar Creek, South Branch**
  - Chlorophyll-a (47234)
  - Oxygen, Dissolved (47235)

- **Chumash Creek**
  - Nitrate (53290)
  - Temperature, water (47196)
  - Turbidity (47197)

pH (47198)

- **Clear Creek (San Benito County)**
  - Alkalinity as CaCO3 (47199)
  - Ammonia (47200)
  - Nitrate (47201)
  - Oxygen, Dissolved (47202)
  - Temperature, water (47204)
  - pH (47205)

- **Congress Street Drain**
  - Chlorpyrifos (47421)
  - Diazinon (47153)
  - Toxicity (47206)

- **Coon Creek**
  - Ammonia (38444)
  - Boron (38923)
  - Chloride (38855)
  - Chlorophyll-a (38885)
  - Escherichia coli (E. coli) (47207)
  - Fecal Coliform (38975)
  - Nitrate (38411)
  - Nitrogen, Nitrite (47208)
  - Oxygen, Dissolved (38971)
  - Sodium (38604)
  - Specific Conductivity (38974)
  - Temperature, water (38413)
  - Turbidity (38429)
  - pH (38430)

- **Cuyama River (above Twitchell Reservoir)**
  - Ammonia (38488)
  - Benthic Community Effects (47210)
  - Chlorophyll-a (39025)
  - Escherichia coli (E. coli) (47209)
  - Nitrate (38829)
  - Nitrogen, Nitrite (47211)
  - Oxygen, Dissolved (38999)
  - Temperature, water (39074)

- **Cuyama River (below Twitchell Reservoir)**
  - Ammonia (38866)
  - Benthic Community Effects (47216)
  - Boron (38569)
  - Chloride (47213)
  - Chlorophyll-a (39410)
  - Escherichia coli (E. coli) (47215)
  - Fecal Coliform (38734)
  - Nitrate (38412)
  - Nitrogen, Nitrite (47217)
  - Oxygen, Dissolved (39468)
  - Sodium (47214)
  - Specific Conductivity (39361)
  - Total Dissolved Solids (47218)
  - Turbidity (38777)
  - pH (38925)

Dairy Creek
- Nitrate (38986)
- Specific Conductivity (38779)
- Temperature, water (38987)
- Turbidity (38477)
- pH (38926)

- **Devereux Creek**
  - Ammonia (38900)
  - Chlorophyll-a (38458)
  - Escherichia coli (E. coli) (47222)
  - Nitrate (39069)
  - Toxicity (41915)
  - Turbidity (38983)
  - pH (39045)

- **Dos Pueblos Canyon Creek**
  - Ammonia (39499)
  - Boron (39307)
  - Chloride (39308)
  - Chlorophyll-a (39309)
  - Escherichia coli (E. coli) (47231)
  - Fecal Coliform (38741)
  - Nitrate (39505)
  - Nitrogen, Nitrite (53544)
  - Oxygen, Dissolved (38726)
  - Specific Conductivity (38781)
  - Temperature, water (39266)
  - Turbidity (39453)
  - pH (38656)

- **Elkhorn Slough**
  - Ammonia (39138)
  - Chlorophyll-a (39192)
  - Escherichia coli (E. coli) (39514)
  - Fecal Coliform (38801)
  - Temperature, water (39420)
  - Turbidity (39433)

- **Espinosa Slough**
  - Chlorophyll-a (39789)
  - Chlorpyrifos (41914)
  - Demeton (47240)
  - Dichlorvos (47241)
  - Dimethoate (47242)
  - Ethoprop (47243)
  - Methyl Parathion (47246)
  - Oxygen, Dissolved (40012)
  - Phorate (47247)

- **Estrella River**
  - Ammonia (39156)
  - Chlorophyll-a (39971)
  - Nitrate (44170)
  - Oxygen, Dissolved (39676)
  - Specific Conductivity (39692)

- **Fall Creek**

- Temperature, water (53291)

- **Franklin Creek (Santa Barbara County)**
  - Ammonia (39234)
  - Azinphos-methyl (Guthion) (47250)
  - Bifenthrin (47273)
  - Boron (39939)
  - Chlordane (47287)
  - Chloride (39838)
  - Chlorophyll-a (39602)
  - Cyfluthrin (47274)
  - Cyhalothrin, Lambda (47275)
  - Cypermethrin (47276)
  - DDD (Dichlorodiphenyldichloroethane) (47279)
  - DDE (Dichlorodiphenyldichloroethylene) (47280)
  - DDT (Dichlorodiphenyltrichloroethane) (47281)
  - Deltamethrin (47277)
  - Demeton (47251)
  - Diazinon (39709)
  - Dichlorvos (47252)
  - Dieldrin (39872)
  - Dimethoate (47253)
  - Disulfoton (47254)
  - Endrin (39902)
  - Esfenvalerate/Fenvalerate (47282)
  - Ethoprop (47264)
  - Fenpropathrin (47283)
  - Fipronil (47284)
  - Fipronil Sulfide (47285)
  - Fipronil Sulfone (47286)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (47288)
  - Malathion (47266)
  - Methidathion (47267)
  - Methyl Parathion (47268)
  - Nitrogen, Nitrite (47269)
  - Oxygen, Dissolved (39179)
  - Parathion (47270)
  - Permethrin, total (47278)
  - Phorate (47271)
  - Phosmet (47272)
  - Specific Conductivity (39180)
  - Temperature, water (40084)
  - Turbidity (40441)

- **Furlong Creek**
  - Ammonia (39629)

- **Gabilan Creek**
  - Boron (40168)
  - Chloride (47305)
  - Chlorophyll-a (40126)
  - Escherichia coli (E. coli) (40201)
  - Nitrogen, Nitrite (47308)
  - Oxygen, Dissolved (40140)
  - Sodium (47303)
  - Specific Conductivity (40187)
  - Total Dissolved Solids (47306)

- **Garrapata Creek**

- Ammonia (39594)
- Chlorophyll-a (40083)
- Escherichia coli (E. coli) (40314)
- Fecal Coliform (40036)
- Nitrate (40200)
- Oxygen, Dissolved (40312)
- Temperature, water (40049)
- Turbidity (40050)
- pH (40051)

- **Gazos Creek**
  - Ammonia (40260)
  - Boron (40449)
  - Chloride (40276)
  - Chlorophyll-a (39772)
  - Escherichia coli (E. coli) (40115)
  - Fecal Coliform (40893)
  - Nitrate (40122)
  - Nitrogen, Nitrite (47319)
  - Oxygen, Dissolved (40453)
  - Sodium (40138)
  - Specific Conductivity (40279)
  - Temperature, water (40139)
  - Turbidity (40149)
  - pH (40027)

- **Glen Annie Canyon**
  - Ammonia (40375)

- **Glen Annie Canyon Creek**
  - Ammonia (52609)
  - Azinphos-methyl (Guthion) (52634)
  - Chlorophyll-a (52557)
  - Chlorpyrifos (52548)
  - Demeton (52625)
  - Diazinon (52746)
  - Dichlorvos (52679)
  - Dimethoate (52669)
  - Disulfoton (52661)
  - Ethoprop (52713)
  - Malathion (52624)
  - Methidathion (52593)
  - Methyl Parathion (52590)
  - Oxygen, Dissolved (52654)
  - Parathion (52552)
  - Phorate (52584)
  - Phosmet (52560)
  - Specific Conductivity (52611)
  - Temperature, water (52617)
  - Turbidity (52559)
  - pH (52743)

- **Greene Valley Creek (Santa Barbara County)**
  - Azinphos-methyl (Guthion) (47374)
  - Bifenthrin (47486)
  - Chlordane (47363)
  - Chlorophyll-a (40451)
  - Cyfluthrin (47487)
  - Cyhalothrin, Lambda (47488)

- Cypermethrin (47490)
- DDD (Dichlorodiphenyldichloroethane) (47364)
- DDE (Dichlorodiphenyldichloroethylene) (47365)
- DDT (Dichlorodiphenyltrichloroethane) (47366)
- Deltamethrin (47489)
- Demeton (47375)
- Diazinon (39639)
- Dichlorvos (47376)
- Dieldrin (47370)
- Dimethoate (47377)
- Disulfoton (47378)
- Endrin (47367)
- Escherichia coli (E. coli) (47321)
- Esfenvalerate/Fenvalerate (47493)
- Ethoprop (47379)
- Fecal Coliform (47320)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (47368)
- Methidathion (47372)
- Methyl Parathion (47494)
- PCBs (Polychlorinated biphenyls) (47369)
- Parathion (47373)
- Permethrin, total (47382)
- Phorate (47381)
- Phosmet (47371)
- pH (40431)

- **Hernandez Reservoir**
  - Aldrin (51312)
  - Chlordane (51314)
  - DDT (Dichlorodiphenyltrichloroethane) (51341)
  - Dieldrin (51315)
  - Endrin (51316)
  - Heptachlor (51317)
  - Heptachlor epoxide (51318)
  - Hexachlorobenzene/ HCB (51319)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51320)
  - Mirex (51321)
  - PCBs (Polychlorinated biphenyls) (51322)
  - Selenium (51324)
  - alpha-Endosulfan (Endosulfan 1) (51313)

- **Huasna River**
  - Ammonia (40486)
  - Benthic Community Effects (47581)
  - Boron (40202)
  - Chloride (40024)
  - Chlorophyll-a (40034)
  - Escherichia coli (E. coli) (47322)
  - Fecal Coliform (40078)
  - Nitrate (40030)
  - Nitrogen, Nitrite (47582)
  - Oxygen, Dissolved (42635)
  - Sodium (40044)
  - Specific Conductivity (40229)
  - Turbidity (40031)
  - pH (40916)

- **Jalama Creek**
  - Ammonia (40654)

Benthic Community Effects (47626)
- Boron (41754)
- Chlorophyll-a (41241)
- Chlorpyrifos (40944)
- Diazinon (41016)
- Escherichia coli (E. coli) (41160)
- Fecal Coliform (40968)
- Nitrate (40969)
- Nitrogen, Nitrite (47627)
- Oxygen, Dissolved (40953)
- Specific Conductivity (41116)
- Toxicity (42597)
- Turbidity (41245)
- pH (41616)

- **Jameson Lake**
  - Aldrin (51431)
  - Chlordane (51433)
  - DDT (Dichlorodiphenyltrichloroethane) (51445)
  - Dieldrin (51434)
  - Endrin (51435)
  - Heptachlor (51437)
  - Heptachlor epoxide (51438)
  - Hexachlorobenzene/ HCB (51440)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51439)
  - Mercury (51442)
  - Mirex (51443)
  - PCBs (Polychlorinated biphenyls) (51444)
  - alpha-Endosulfan (Endosulfan 1) (51432)

- **Kings Creek**
  - Oxygen, Dissolved (41381)

- **La Brea Creek**
  - Ammonia (41222)
  - Chlorophyll-a (41278)
  - Escherichia coli (E. coli) (47323)
  - Nitrate (41310)
  - Oxygen, Dissolved (41237)
  - Temperature, water (41183)
  - Turbidity (41354)
  - pH (41313)

- **Laguna Creek (San Benito County)**
  - Alkalinity as CaCO3 (47632)
  - Ammonia (47641)
  - Nitrate (47642)
  - Nitrogen, Nitrite (47643)
  - Oxygen, Dissolved (47638)
  - Temperature, water (47634)
  - pH (47639)

- **Limekiln Creek**
  - Ammonia (41360)
  - Benthic Community Effects (47647)
  - Boron (42017)
  - Chloride (41312)
  - Chlorophyll-a (41365)
  - Escherichia coli (E. coli) (41167)

- Fecal Coliform (41178)
- Nitrate (41055)
- Nitrogen, Nitrite (47652)
- Oxygen, Dissolved (41324)
- Sodium (41264)
- Specific Conductivity (41384)
- Temperature, water (41265)
- Turbidity (41118)
- pH (41343)

- **Little Oso Flaco Creek**
  - Ammonia (41103)
  - Chlorophyll-a (40981)
  - Chlorpyrifos (41031)
  - Demeton (47692)
  - Diazinon (40975)
  - Dichlorvos (47695)
  - Dimethoate (47699)
  - Disulfoton (47700)
  - Escherichia coli (E. coli) (47324)
  - Ethoprop (47701)
  - Malathion (47703)
  - Methyl Parathion (47707)
  - Oxygen, Dissolved (40983)
  - Phorate (47708)
  - Temperature, water (42164)
  - pH (41995)

- **Little Sur River**
  - Ammonia (41011)
  - Boron (41019)
  - Chloride (41154)
  - Chlorophyll-a (42113)
  - Escherichia coli (E. coli) (40994)
  - Fecal Coliform (42247)
  - Nitrate (42083)
  - Nitrogen, Nitrite (47772)
  - Oxygen, Dissolved (42115)
  - Sodium (40979)
  - Specific Conductivity (42117)
  - Temperature, water (42093)
  - Turbidity (42169)
  - pH (41047)

- **Llagas Creek (below Chesbro Reservoir)**
  - Ammonia (42220)
  - Chlorophyll-a (42222)
  - Temperature, water (42207)
  - Toxicity (42020)

- **Llagas Creek, unnamed drain 3 to creek at treatment ponds (near Bloomfield Ave)**
  - Oxygen, Dissolved (47870)
  - Temperature, water (47871)
  - pH (47872)

- **Llagas Creek, unnamed drain to creek at treatment ponds (near Southside Drive)**
  - Oxygen, Dissolved (47873)
  - Temperature, water (47874)

pH (47875)

- **Llagas Creek, unnamed drain2 to creek at treatment ponds (near Engle Way)**
  - Oxygen, Dissolved (47926)
  - Temperature, water (47928)
  - pH (47929)

- **Loch Lomond**
  - Aldrin (51449)
  - Chlordane (51451)
  - DDT (Dichlorodiphenyltrichloroethane) (51462)
  - Dieldrin (51452)
  - Endrin (51453)
  - Heptachlor (51454)
  - Heptachlor epoxide (51455)
  - Hexachlorobenzene/ HCB (51456)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51457)
  - Mercury (51458)
  - Mirex (51459)
  - PCBs (Polychlorinated biphenyls) (51460)
  - Selenium (51461)
  - alpha-Endosulfan (Endosulfan 1) (51450)

- **Lompico Creek**
  - Alkalinity as CaCO3 (47957)
  - Ammonia (47958)
  - Chloride (47959)
  - Nitrogen, Nitrite (47961)
  - Oxygen, Dissolved (42060)
  - Specific Conductivity (42061)
  - Temperature, water (41533)
  - pH (41483)

- **Lopez Lake**
  - Aldrin (51466)
  - Chlordane (51469)
  - DDT (Dichlorodiphenyltrichloroethane) (51481)
  - Dieldrin (51470)
  - Endrin (51471)
  - Heptachlor (51473)
  - Heptachlor epoxide (51474)
  - Hexachlorobenzene/ HCB (51475)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51476)
  - Mercury (51477)
  - Mirex (51478)
  - PCBs (Polychlorinated biphenyls) (51479)
  - Selenium (51480)
  - alpha-Endosulfan (Endosulfan 1) (51467)

- **Los Berros Creek**
  - Ammonia (42085)
  - Chlorophyll-a (41436)
  - Oxygen, Dissolved (42082)
  - Specific Conductivity (42121)
  - Temperature, water (42076)
  - Toxicity (44162)
  - Turbidity (41515)
  - pH (41565)

- **Los Osos Creek (Los Osos to Los Osos Creek Estuary)**
  - Specific Conductivity (51389)
  - Temperature, water (51383)
  - Turbidity (51384)
  - pH (51377)

- **Los Osos Creek (upstream of Los Osos)**
  - Escherichia coli (E. coli) (47325)
  - Nitrate (47327)
  - Specific Conductivity (47329)
  - Temperature, water (47330)
  - Turbidity (47331)
  - pH (47332)

- **Los Osos Creek Estuary**
  - Enterococcus (53189)
  - Temperature, water (51381)
  - pH (51430)

- **Main Street Channel**
  - Azinphos-methyl (Guthion) (48083)
  - Bifenthrin (48094)
  - Chlordane (48154)
  - Chlorophyll-a (42192)
  - Cyfluthrin (48098)
  - Cyhalothrin, Lambda (48118)
  - Cypermethrin (48099)
  - DDD (Dichlorodiphenyldichloroethane) (48156)
  - DDE (Dichlorodiphenyldichloroethylene) (48158)
  - DDT (Dichlorodiphenyltrichloroethane) (48153)
  - Deltamethrin (48121)
  - Demeton (48163)
  - Dichlorvos (48164)
  - Dieldrin (48155)
  - Dimethoate (48165)
  - Disulfoton (48166)
  - Endrin (48160)
  - Esfenvalerate/Fenvalerate (48132)
  - Ethoprop (48167)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (48161)
  - Methidathion (48093)
  - Methyl Parathion (48135)
  - PCBs (Polychlorinated biphenyls) (48162)
  - Parathion (48087)
  - Permethrin, total (48136)
  - Phorate (48169)
  - Phosmet (48090)

- **Maria Ygnacio Creek**
  - Ammonia (42201)
  - Boron (42042)
  - Chloride (42047)
  - Chlorophyll-a (42046)
  - Nitrate (41569)
  - Nitrogen, Nitrite (48312)
  - Oxygen, Dissolved (41395)
  - Specific Conductivity (41558)
  - Temperature, water (41424)

- **McGowan Ditch**
  - Alachlor (48317)
  - Atrazine (48319)
  - Bifenthrin (48350)
  - Butylate (48452)
  - Carbaryl (48322)
  - Carbofuran (48323)
  - Chlorothalonil (48331)
  - Chlorpyrifos (47448)
  - Cyfluthrin (48357)
  - Cyhalothrin, Lambda (48354)
  - Cypermethrin (48355)
  - DDT (Dichlorodiphenyltrichloroethane) (48455)
  - Deltamethrin (48457)
  - Diazinon (47155)
  - Disulfoton (48333)
  - Esfenvalerate/Fenvalerate (48458)
  - Ethalfluralin (48343)
  - Fenpropathrin (48460)
  - Fipronil (48461)
  - Fipronil Sulfide (48462)
  - Fipronil Sulfone (48463)
  - Hexazinone (48344)
  - Iprodione (48334)
  - Methidathion (48325)
  - Methyl Parathion (48459)
  - Molinate (48327)
  - Napropamide (48345)
  - Oxygen, Dissolved (42144)
  - Pentachlorobenzene (PCNB) (48336)
  - Permethrin, total (48356)
  - Phosmet (48326)
  - Prometryn (48328)
  - Propanil (DCPA mono- and di-acid degrad) (48346)
  - Propiconazole (48347)
  - Resmethrin (48339)
  - Simazine (48329)
  - Temperature, water (42145)
  - Thiobencarb/Bolero (48330)
  - Trifluralin (48348)
  - Vinclozolin (48340)
  - pH (42188)

- **Merrit Ditch**
  - Chlorophyll-a (42108)
  - Chlorpyrifos (42205)
  - Demeton (48467)
  - Dichlorvos (48468)
  - Dimethoate (48469)
  - Disulfoton (48473)
  - Ethoprop (48474)
  - Malathion (48470)
  - Methyl Parathion (48471)
  - Phorate (48472)
  - Temperature, water (42073)

- **Mill Creek (Cape San Martin)**
  - Ammonia (42186)
  - Chlorophyll-a (42215)

- Escherichia coli (E. coli) (42053)
- Fecal Coliform (42063)
- Nitrate (42067)
- Oxygen, Dissolved (42052)
- Temperature, water (41445)
- Turbidity (41490)
- pH (41449)

- **Millers Canal**
  - Ammonia (42199)

- **Mission Creek (Santa Barbara County)**
  - Ammonia (42167)
  - Anthracene (41492)
  - Arsenic (41493)
  - Benthic Community Effects (48484)
  - Benzo(a)anthracene (41233)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41541)
  - Bifenthrin (48488)
  - Cadmium (41234)
  - Chlordane (48485)
  - Chlorophyll-a (42228)
  - Chlorpyrifos (41412)
  - Chromium (42157)
  - Chrysene (C1-C4) (42213)
  - Copper (42214)
  - Cyfluthrin (48489)
  - Cyhalothrin, Lambda (48490)
  - Cypermethrin (48491)
  - DDD (Dichlorodiphenyldichloroethane) (48481)
  - DDE (Dichlorodiphenyldichloroethylene) (48482)
  - DDT (Dichlorodiphenyltrichloroethane) (48483)
  - Deltamethrin (48492)
  - Diazinon (42243)
  - Dieldrin (42218)
  - Endrin (42229)
  - Esfenvalerate/Fenvalerate (48493)
  - Fenpropathrin (48494)
  - Fluoranthene (42230)
  - Fluorene (42233)
  - Lead (42234)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (48495)
  - Mercury (42091)
  - Methyl Parathion (48496)
  - Naphthalene (42092)
  - Nickel (42217)
  - Nitrate (41471)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (48486)
  - PCBs (Polychlorinated biphenyls) (48487)
  - Permethrin, total (48497)
  - Phenanthrene (42224)
  - Pyrene (42235)
  - Temperature, water (41472)
  - Turbidity (42250)
  - Zinc (42049)
  - pH (42251)

- **Mission Creek Lagoon (Santa Barbara County)**
  - Toxicity (48498)

- **Montecito Creek**
  - Ammonia (42142)
  - Benthic Community Effects (48499)
  - Chlorophyll-a (42077)
  - Escherichia coli (E. coli) (47334)
  - Fecal Coliform (42147)
  - Nitrate (42148)
  - Oxygen, Dissolved (42136)
  - Temperature, water (42153)
  - Turbidity (42196)
  - pH (42197)

- **Monterey Bay South (Coastline)**
  - Arsenic (32522)
  - Cadmium (33040)
  - Chlordane (33290)
  - Chlorpyrifos (47523)
  - DDT (Dichlorodiphenyltrichloroethane) (33354)
  - Dieldrin (33441)
  - Endosulfan (33426)
  - Endrin (49335)
  - Enterococcus (33433)
  - Fecal Coliform (42174)
  - Heptachlor epoxide (49336)
  - Hexachlorobenzene/ HCB (49337)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (33358)
  - Mercury (49338)
  - Mirex (49341)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (49342)
  - PCBs (Polychlorinated biphenyls) (49343)
  - Selenium (40982)
  - Total Coliform (33421)

- **Monterey Bay at Moss Landing**
  - Arsenic (49212)
  - Cadmium (49214)
  - Chlordane (49217)
  - Chlorpyrifos (47520)
  - DDT (Dichlorodiphenyltrichloroethane) (49219)
  - Dieldrin (49221)
  - Endosulfan (49223)
  - Endrin (49225)
  - Heptachlor epoxide (49226)
  - Hexachlorobenzene/ HCB (49228)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49229)
  - Mercury (49231)
  - Mirex (49232)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (49233)
  - PCBs (Polychlorinated biphenyls) (49234)
  - Selenium (49235)

- **Monterey Bay at Point Santa Cruz**
  - Arsenic (49283)
  - Cadmium (49284)
  - Chlordane (49285)
  - Chlorpyrifos (47522)
  - DDT (Dichlorodiphenyltrichloroethane) (49286)
  - Dieldrin (49287)
  - Endosulfan (49289)

- Endrin (49290)
- Heptachlor epoxide (49292)
- Hexachlorobenzene/ HCB (49293)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49297)
- Mercury (49298)
- Mirex (49299)
- PAHs (Polycyclic Aromatic Hydrocarbons) (49300)
- PCBs (Polychlorinated biphenyls) (49302)
- Selenium (49303)

- **Monterey Harbor**
  - Aldrin (51704)
  - Cadmium (42104)
  - Chlordane (49351)
  - Chlorpyrifos (47524)
  - DDT (Dichlorodiphenyltrichloroethane) (49352)
  - Diazinon (47170)
  - Dieldrin (42112)
  - Endosulfan (49411)
  - Endrin (42161)
  - Heptachlor (49412)
  - Heptachlor epoxide (49413)
  - Hexachlorobenzene/ HCB (49414)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49415)
  - Mercury (41066)
  - Mirex (49416)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (49418)
  - Selenium (49420)
  - Toxaphene (52311)
  - Tributyltin TBT (Tributylstanne) (52312)
  - Zinc (41095)
  - pH (52398)

- **Moro Cojo Slough**
  - Chlorophyll-a (41098)
  - Chlorpyrifos (42124)
  - Demeton (48521)
  - Diazinon (42125)
  - Dichlorvos (48524)
  - Dimethoate (48525)
  - Ethoprop (48526)
  - Fecal Coliform (41145)
  - Malathion (48527)
  - Methyl Parathion (48529)
  - Phorate (48530)
  - Temperature, water (44627)

- **Morro Bay**
  - Cadmium (32880)
  - Chlordane (49499)
  - Chlorpyrifos (47530)
  - DDT (Dichlorodiphenyltrichloroethane) (49516)
  - Diazinon (47171)
  - Dieldrin (49527)
  - Endosulfan (49530)
  - Endrin (49532)
  - Enterococcus (49129)
  - Heptachlor epoxide (49535)
  - Hexachlorobenzene/ HCB (49538)

Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49542)
- Mercury (32808)
- Mirex (49548)
- PAHs (Polycyclic Aromatic Hydrocarbons) (49551)
- PCBs (Polychlorinated biphenyls) (49552)
- Selenium (49555)
- Toxaphene (49557)
- Tributyltin TBT (Tributylstanne) (49560)

- **Morro Creek**
  - Ammonia (41017)
  - Boron (41035)
  - Chloride (41131)
  - Chlorophyll-a (41144)
  - Escherichia coli (E. coli) (47335)
  - Nitrate (41105)
  - Nitrogen, Nitrite (48535)
  - Oxygen, Dissolved (41088)
  - Sodium (41125)
  - Specific Conductivity (41089)
  - Temperature, water (40956)
  - Turbidity (41114)
  - pH (41119)

- **Moss Landing Harbor**
  - Aldrin (49589)
  - Cadmium (42080)
  - Chlordane (49598)
  - Chlorophyll-a (41133)
  - Endosulfan (49693)
  - Endrin (42095)
  - Heptachlor (49706)
  - Heptachlor epoxide (49709)
  - Hexachlorobenzene/ HCB (49711)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49712)
  - Mercury (42232)
  - Mirex (49718)
  - Nitrate (52525)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (49737)
  - Selenium (49744)
  - Temperature, water (40987)
  - Toxaphene (49747)
  - Tributyltin TBT (Tributylstanne) (49752)
  - Turbidity (41034)

- **Nacimiento Reservoir**
  - Aldrin (51482)
  - Chlordane (51484)
  - DDT (Dichlorodiphenyltrichloroethane) (51543)
  - Dieldrin (51485)
  - Endrin (51486)
  - Heptachlor (51487)
  - Heptachlor epoxide (51488)
  - Hexachlorobenzene/ HCB (51489)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51490)
  - Mirex (51540)
  - PCBs (Polychlorinated biphenyls) (51541)
  - Selenium (51542)
  - alpha-Endosulfan (Endosulfan 1) (51483)

- **Nacimiento River (below Nacimiento Reservoir)**
  - Ammonia (41001)
  - Boron (40957)
  - Chloride (53546)
  - Chlorophyll-a (41126)
  - Escherichia coli (E. coli) (41045)
  - Fecal Coliform (41063)
  - Nitrate (41124)
  - Nitrogen, Nitrite (48553)
  - Oxygen, Dissolved (40985)
  - Sodium (48555)
  - Specific Conductivity (41156)
  - Temperature, water (41064)
  - Total Dissolved Solids (48557)
  - Turbidity (40976)
  - pH (42057)

- **Natividad Creek**
  - Chlorophyll-a (41054)
  - Chlorpyrifos (41002)
  - Demeton (48606)
  - Dichlorvos (48608)
  - Dimethoate (48609)
  - Disulfoton (48610)
  - Ethoprop (48612)
  - Malathion (48613)
  - Methyl Parathion (48614)
  - Phorate (48616)

- **Newell Creek (Lower)**
  - Temperature, water (42043)

- **Nipomo Creek**
  - Ammonia (41799)
  - Chlorophyll-a (41641)
  - Oxygen, Dissolved (41363)
  - Turbidity (41378)
  - pH (41172)

- **Old Creek (above Whale Rock Reservoir)**
  - Ammonia (41293)
  - Boron (41254)
  - Chloride (41778)
  - Chlorophyll-a (41725)
  - Nitrate (41652)
  - Nitrogen, Nitrite (48721)
  - Oxygen, Dissolved (41190)
  - Sodium (41346)
  - Specific Conductivity (41328)
  - Temperature, water (41320)
  - Turbidity (41321)
  - pH (41334)

- **Old Mission Creek (Santa Barbara County)**
  - Toxicity (48722)

- **Old Salinas River**

Ammonia (41248)
- Bifenthrin (48724)
- Cyfluthrin (48725)
- Cyhalothrin, Lambda (48726)
- Cypermethrin (48727)
- Demeton (48729)
- Dichlorvos (48733)
- Dimethoate (48734)
- Disulfoton (48738)
- Dyfonate (Fonofos or Fonophos) (48730)
- Esfenvalerate/Fenvalerate (48731)
- Ethoprop (48739)
- Fenamiphos (48740)
- Malathion (48735)
- Methidathion (48737)
- Methyl Parathion (48736)
- Permethrin, total (48728)
- Phorate (48732)
- Temperature, water (41701)

- **Orcutt Creek**
  - Alachlor (48770)
  - Atrazine (48764)
  - Azinphos-methyl (Guthion) (48776)
  - Bifenthrin (47310)
  - Butylate (48777)
  - Carbofuran (48765)
  - Chlordane (48792)
  - Chlorophyll-a (41648)
  - Chlorothalonil (48778)
  - Cypermethrin (48799)
  - Deltamethrin (48803)
  - Demeton (48808)
  - Dichlorvos (48809)
  - Dimethoate (48810)
  - Disulfoton (48811)
  - Endrin (48793)
  - Esfenvalerate/Fenvalerate (48804)
  - Ethalfluralin (48779)
  - Ethoprop (48813)
  - Fenpropathrin (48805)
  - Fipronil (48796)
  - Fipronil Sulfide (48814)
  - Fipronil Sulfone (48815)
  - Hexazinone (48780)
  - Iprodione (48781)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (48794)
  - Methidathion (48816)
  - Methyl Parathion (48806)
  - Molinate (48766)
  - Napropamide (48782)
  - Nitrogen, Nitrite (48783)
  - Oxygen, Dissolved (41022)
  - PCBs (Polychlorinated biphenyls) (48795)
  - Parathion (48784)
  - Pentachlorobenzene (PCNB) (48785)
  - Permethrin, total (48807)
  - Phorate (48817)
  - Phosmet (48818)
  - Prometryn (48767)

- Propanil (DCPA mono- and di-acid degrad) (48786)
- Propiconazole (48787)
- Resmethrin (48788)
- Simazine (48768)
- Thiobencarb/Bolero (48769)
- Trifluralin (48789)
- Vinclozolin (48790)
- pH (41115)

- **Oso Flaco Creek**
  - Azinphos-methyl (Guthion) (48841)
  - Bifenthrin (48851)
  - Boron (41685)
  - Chlordane (48843)
  - Chlorophyll-a (41272)
  - Cyfluthrin (48852)
  - Cyhalothrin, Lambda (48879)
  - Cypermethrin (48880)
  - DDD (Dichlorodiphenyldichloroethane) (48844)
  - DDE (Dichlorodiphenyldichloroethylene) (48845)
  - DDT (Dichlorodiphenyltrichloroethane) (48846)
  - Deltamethrin (48881)
  - Demeton (48885)
  - Diazinon (41649)
  - Dichlorvos (48888)
  - Dieldrin (48847)
  - Dimethoate (48889)
  - Disulfoton (48891)
  - Endrin (48848)
  - Escherichia coli (E. coli) (47352)
  - Esfenvalerate/Fenvalerate (48882)
  - Ethoprop (48893)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (48849)
  - Methidathion (48898)
  - Methyl Parathion (48911)
  - Nitrogen, Nitrite (48840)
  - Oxygen, Dissolved (41663)
  - PCBs (Polychlorinated biphenyls) (48850)
  - Parathion (48842)
  - Permethrin, total (48883)
  - Phorate (48914)
  - Phosmet (48915)
  - Specific Conductivity (41786)
  - pH (40948)

- **Oso Flaco Lake**
  - Aldrin (48993)
  - Ammonia (41287)
  - Azinphos-methyl (Guthion) (48922)
  - Bifenthrin (48935)
  - Chlordane (48948)
  - Chlorpyrifos (41261)
  - Cyfluthrin (48937)
  - Cyhalothrin, Lambda (48938)
  - Cypermethrin (48939)
  - DDD (Dichlorodiphenyldichloroethane) (49029)
  - DDE (Dichlorodiphenyldichloroethylene) (49030)
  - Deltamethrin (48950)
  - Demeton (48984)
  - Diazinon (41275)

- Dichlorvos (48923)
- Dimethoate (48924)
- Esfenvalerate/Fenvalerate (48958)
- Ethion (48928)
- Ethoprop (48927)
- Heptachlor (49017)
- Heptachlor epoxide (49021)
- Hexachlorobenzene/ HCB (49023)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (48952)
- Malathion (48926)
- Methidathion (48930)
- Methyl Parathion (48940)
- Mirex (49026)
- PAHs (Polycyclic Aromatic Hydrocarbons) (49028)
- PCBs (Polychlorinated biphenyls) (48953)
- Parathion (48931)
- Permethrin, total (48942)
- Phorate (48932)
- Phosmet (48934)
- Selenium (49027)
- Turbidity (41818)
- alpha-Endosulfan (Endosulfan 1) (49018)
- pH (44520)

- **Pacific Ocean (Point Ano Nuevo to Soquel Point)**
  - Copper (51809)
  - Oxygen, Dissolved (53282)
  - Zinc (52322)
  - pH (53283)

- **Pacific Ocean (Salinas River to Point Pinos)**
  - Copper (51812)
  - Zinc (52327)

- **Pacific Ocean (outside Santa Barbara Harbor)**
  - Copper (51807)
  - Oxygen, Dissolved (53280)
  - Zinc (52321)
  - pH (53281)

- **Pacific Ocean at Anacapa Island North Middle Island**
  - Arsenic (49771)
  - Cadmium (49774)
  - Chlordane (49775)
  - Chlorpyrifos (47878)
  - DDT (Dichlorodiphenyltrichloroethane) (49787)
  - Dieldrin (49776)
  - Endosulfan (49777)
  - Endrin (49778)
  - Heptachlor epoxide (49779)
  - Hexachlorobenzene/ HCB (49780)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49781)
  - Mercury (49782)
  - Mirex (49783)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (49784)
  - PCBs (Polychlorinated biphenyls) (49785)
  - Selenium (49786)

- **Pacific Ocean at Ano Nuevo, Ano Nuevo Island**

- Arsenic (49788)
- Cadmium (49789)
- Chlordane (49790)
- Chlorpyrifos (47879)
- DDT (Dichlorodiphenyltrichloroethane) (49803)
- Dieldrin (49791)
- Endosulfan (49792)
- Endrin (49793)
- Heptachlor epoxide (49795)
- Hexachlorobenzene/ HCB (49796)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49797)
- Mercury (49798)
- Mirex (49799)
- PAHs (Polycyclic Aromatic Hydrocarbons) (49800)
- PCBs (Polychlorinated biphenyls) (49801)
- Selenium (49802)

- **Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)**
  - Fecal Coliform (36214)

- **Pacific Ocean at Arroyo Hondo Canyon mouth**
  - Arsenic (49952)
  - Cadmium (49953)
  - Chlordane (49954)
  - Chlorpyrifos (47880)
  - DDT (Dichlorodiphenyltrichloroethane) (49973)
  - Dieldrin (49958)
  - Endosulfan (49959)
  - Endrin (49961)
  - Heptachlor epoxide (49962)
  - Hexachlorobenzene/ HCB (49963)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49964)
  - Mercury (49966)
  - Mirex (49967)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (49968)
  - PCBs (Polychlorinated biphenyls) (49970)
  - Selenium (49972)

- **Pacific Ocean at Avila Beach (Avila Pier)**
  - Fecal Coliform (36952)

- **Pacific Ocean at Avila Beach (SLO creek mouth)**
  - Fecal Coliform (36235)

- **Pacific Ocean at Bean Hollow State Beach**
  - Enterococcus (46913)
  - Fecal Coliform (46914)
  - Total Coliform (46915)

- **Pacific Ocean at Butterfly Beach (Santa Barbara County)**
  - Enterococcus (36186)
  - Fecal Coliform (36170)
  - Total Coliform (36316)

- **Pacific Ocean at Carmel Beach at Ocean Avenue**
  - Arsenic (50071)
  - Cadmium (50073)
  - Chlordane (50074)

    - Chlorpyrifos (47882)
    - DDT (Dichlorodiphenyltrichloroethane) (50086)
    - Dieldrin (50075)
    - Endosulfan (50076)
    - Endrin (50077)
    - Enterococcus (35075)
    - Fecal Coliform (36936)
    - Heptachlor epoxide (50078)
    - Hexachlorobenzene/ HCB (50079)
    - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (50080)
    - Mercury (50081)
    - Mirex (50082)
    - PAHs (Polycyclic Aromatic Hydrocarbons) (50083)
    - PCBs (Polychlorinated biphenyls) (50084)
    - Selenium (50085)
    - Total Coliform (36940)

- **Pacific Ocean at Carpinteria City Beach (Santa Barbara County)**
    - Enterococcus (37018)
    - Fecal Coliform (36343)
    - Total Coliform (37090)

- **Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)**
    - Arsenic (50088)
    - Cadmium (50090)
    - Chlordane (50092)
    - Chlorpyrifos (47883)
    - DDT (Dichlorodiphenyltrichloroethane) (50094)
    - Dieldrin (50096)
    - Endosulfan (50098)
    - Endrin (50100)
    - Enterococcus (44605)
    - Heptachlor epoxide (50102)
    - Hexachlorobenzene/ HCB (50103)
    - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (50104)
    - Mirex (50105)
    - PAHs (Polycyclic Aromatic Hydrocarbons) (50107)
    - PCBs (Polychlorinated biphenyls) (50108)
    - Selenium (50109)

- **Pacific Ocean at Cayucos (Cayucos Pier)**
    - Enterococcus (37464)
    - Fecal Coliform (37099)
    - Total Coliform (37600)

- **Pacific Ocean at Cayucos (Old Creek Mouth)**
    - Enterococcus (37625)
    - Fecal Coliform (37427)
    - Total Coliform (37612)

- **Pacific Ocean at Corcoran Lagoon Beach**
    - Enterococcus (37626)
    - Fecal Coliform (37627)
    - Total Coliform (37097)

- **Pacific Ocean at Cowell Beach (Santa Cruz County)**
    - Enterococcus (37622)

- **Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)**
  - Fecal Coliform (37437)

- **Pacific Ocean at El Capitan Beach (Santa Barbara County)**
  - Enterococcus (36800)
  - Fecal Coliform (36801)
  - Total Coliform (37425)

- **Pacific Ocean at Garrapata State Beach**
  - Enterococcus (46910)
  - Fecal Coliform (46911)
  - Total Coliform (46912)

- **Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)**
  - Enterococcus (38966)
  - Fecal Coliform (39070)

- **Pacific Ocean at Gazos Creek Beach**
  - Enterococcus (46939)
  - Fecal Coliform (46940)
  - Total Coliform (46941)

- **Pacific Ocean at Goleta Beach (Santa Barbara County)**
  - Enterococcus (47154)
  - Fecal Coliform (38601)

- **Pacific Ocean at Guadalupe Dunes (Santa Barbara County)**
  - Enterococcus (36984)
  - Fecal Coliform (36804)

- **Pacific Ocean at Hammonds Beach (Santa Barbara County)**
  - Enterococcus (36731)

- **Pacific Ocean at Haskells Beach (Santa Barbara County)**
  - Fecal Coliform (38544)
  - Total Coliform (38545)

- **Pacific Ocean at Hope Ranch Beach (Santa Barbara County)**
  - Enterococcus (37562)

- **Pacific Ocean at Julia Pfeiffer Burns Beach**
  - Arsenic (50113)
  - Chlordane (50115)
  - Chlorpyrifos (47884)
  - DDT (Dichlorodiphenyltrichloroethane) (50117)
  - Dieldrin (50118)
  - Endosulfan (50119)
  - Endrin (50120)
  - Heptachlor epoxide (50121)
  - Hexachlorobenzene/ HCB (50122)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (50123)
  - Mercury (50124)
  - Mirex (50126)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (50127)
  - PCBs (Polychlorinated biphenyls) (50128)
  - Selenium (50129)

- **Pacific Ocean at Leadbetter Beach (Santa Barbara County)**
  - Fecal Coliform (38453)

- **Pacific Ocean at Lighthouse Beach (Santa Cruz County)**
  - Enterococcus (37436)
  - Fecal Coliform (37115)
  - Total Coliform (36699)

- **Pacific Ocean at Lovers Point (Monterey County)**
  - Enterococcus (37754)
  - Fecal Coliform (37614)
  - Total Coliform (37131)

- **Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk**
  - Enterococcus (37151)
  - Fecal Coliform (37223)

- **Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth**
  - Enterococcus (36812)
  - Fecal Coliform (36655)

- **Pacific Ocean at Manresa Beach**
  - Enterococcus (37598)
  - Fecal Coliform (36610)
  - Total Coliform (36632)

- **Pacific Ocean at Marina State Beach**
  - Enterococcus (47056)
  - Fecal Coliform (47057)
  - Total Coliform (33496)

- **Pacific Ocean at Mitchells Cove Beach**
  - Enterococcus (37422)
  - Fecal Coliform (37423)

- **Pacific Ocean at Monastery Beach**
  - Enterococcus (37459)
  - Fecal Coliform (37349)
  - Total Coliform (37124)

- **Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)**
  - Enterococcus (36633)
  - Fecal Coliform (36647)
  - Total Coliform (36767)

- **Pacific Ocean at Monterey State Beach (Del Monte Beach)**
  - Fecal Coliform (36770)

- **Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)**
  - Enterococcus (36716)
  - Fecal Coliform (36717)
  - Total Coliform (37032)

- **Pacific Ocean at Moran Lake, County Beach**
  - Enterococcus (37120)

Fecal Coliform (37755)
    - Total Coliform (37033)

- **Pacific Ocean at Morro Bay City Beach (Atascadero Road)**
    - Enterococcus (37041)
    - Fecal Coliform (36835)
    - Total Coliform (36851)

- **Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)**
    - Enterococcus (36698)
    - Fecal Coliform (37005)
    - Total Coliform (37004)

- **Pacific Ocean at Morro Bay City Beach (Morro Rock)**
    - Enterococcus (37058)
    - Fecal Coliform (37113)
    - Total Coliform (37292)

- **Pacific Ocean at Morro Strand State Beach (Driftwood Ave)**
    - Enterococcus (38012)
    - Fecal Coliform (37927)
    - Total Coliform (37928)

- **Pacific Ocean at Natural Bridges Beach**
    - Enterococcus (37300)
    - Fecal Coliform (37490)

- **Pacific Ocean at New Brighton Beach (Santa Cruz County)**
    - Enterococcus (37242)
    - Fecal Coliform (37319)

- **Pacific Ocean at Ocean Beach (Santa Barbara County)**
    - Enterococcus (38891)

- **Pacific Ocean at Oceano Dunes**
    - Enterococcus (47144)
    - Fecal Coliform (47145)
    - Total Coliform (47146)

- **Pacific Ocean at Olde Port Beach (131 yards west of restrooms)**
    - Enterococcus (38230)
    - Fecal Coliform (44239)

- **Pacific Ocean at Olde Port Beach (at restrooms)**
    - Fecal Coliform (37520)
    - Total Coliform (37521)

- **Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)**
    - Enterococcus (37903)
    - Fecal Coliform (37948)
    - Total Coliform (38120)

- **Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave**
    - Enterococcus (37444)
    - Fecal Coliform (36725)
    - Total Coliform (41570)

- **Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave**
  - Enterococcus (41581)
  - Fecal Coliform (41561)
  - Total Coliform (44443)

- **Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way**
  - Enterococcus (41582)
  - Fecal Coliform (37118)
  - Total Coliform (41406)

- **Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave**
  - Enterococcus (43096)
  - Fecal Coliform (41469)

- **Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave**
  - Enterococcus (41970)
  - Fecal Coliform (41971)

- **Pacific Ocean at Pleasure Point Beach**
  - Enterococcus (37176)
  - Fecal Coliform (37926)
  - Total Coliform (37382)

- **Pacific Ocean at Point Lobos at Weston Beach**
  - Arsenic (50445)
  - Cadmium (50449)
  - Chlordane (50452)
  - Chlorpyrifos (47885)
  - DDT (Dichlorodiphenyltrichloroethane) (50453)
  - Dieldrin (50456)
  - Endosulfan (50459)
  - Endrin (50455)
  - Heptachlor epoxide (50461)
  - Hexachlorobenzene/ HCB (50462)
  - Hexachlorocyclohexane (HCH) (50463)
  - Mercury (50465)
  - Mirex (50468)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (50470)
  - PCBs (Polychlorinated biphenyls) (50471)
  - Selenium (50473)

- **Pacific Ocean at Point Santa Barbara**
  - Arsenic (50478)
  - Cadmium (50479)
  - Chlordane (50480)
  - Chlorpyrifos (47886)
  - DDT (Dichlorodiphenyltrichloroethane) (50481)
  - Dieldrin (50482)
  - Endrin (50483)
  - Hexachlorobenzene/ HCB (50484)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (50757)
  - Mercury (50485)
  - Mirex (50518)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (50519)
  - PCBs (Polychlorinated biphenyls) (50520)
  - Selenium (50521)

- **Pacific Ocean at Refugio Beach (Santa Barbara County)**
  - Fecal Coliform (37815)

- **Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)**
  - Enterococcus (37875)
  - Fecal Coliform (37874)
  - Total Coliform (37876)

- **Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth**
  - Enterococcus (44940)
  - Fecal Coliform (41869)

- **Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach**
  - Enterococcus (38329)
  - Fecal Coliform (38293)
  - Total Coliform (38352)

- **Pacific Ocean at San Carlos Beach (Monterey County)**
  - Enterococcus (38253)
  - Fecal Coliform (38254)
  - Total Coliform (37946)

- **Pacific Ocean at San Miguel Island, Otter Harbor**
  - Arsenic (51789)
  - Cadmium (51791)

- **Pacific Ocean at San Simeon Beach (Pico Ave)**
  - Enterococcus (37750)
  - Fecal Coliform (38342)
  - Total Coliform (37680)

- **Pacific Ocean at San Vicente Beach (Davenport)**
  - Enterococcus (37742)
  - Fecal Coliform (38361)
  - Total Coliform (37654)

- **Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)**
  - Enterococcus (37717)
  - Fecal Coliform (37671)
  - Total Coliform (38502)

- **Pacific Ocean at Scott Creek Beach**
  - Enterococcus (38535)
  - Fecal Coliform (38536)
  - Total Coliform (38199)

- **Pacific Ocean at Seabright (Castle) Beach**
  - Enterococcus (38155)
  - Fecal Coliform (38140)

- **Pacific Ocean at Seacliff State Beach**
  - Enterococcus (37734)
  - Fecal Coliform (37975)
  - Total Coliform (38257)

- **Pacific Ocean at Spanish Bay Beach**

    - Enterococcus (33500)
    - Fecal Coliform (38191)
    - Total Coliform (37838)

- **Pacific Ocean at Stillwater Cove Beach**
    - Fecal Coliform (42305)
    - Total Coliform (41919)

- **Pacific Ocean at Summerland Beach**
    - Enterococcus (39072)
    - Fecal Coliform (37826)
    - Total Coliform (37839)

- **Pacific Ocean at Sunny Cove Beach**
    - Enterococcus (38410)
    - Fecal Coliform (38538)
    - Total Coliform (38553)

- **Pacific Ocean at Sunset Beach**
    - Enterococcus (38942)
    - Fecal Coliform (38857)
    - Total Coliform (38651)

- **Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)**
    - Enterococcus (33294)
    - Fecal Coliform (38655)
    - Total Coliform (38695)

- **Pacific Ocean at Twin Lakes Beach (Santa Cruz County)**
    - Enterococcus (38387)
    - Fecal Coliform (41697)

- **Pacific Ocean at Valley View (part of Carmel River St Beach)**
    - Enterococcus (47167)
    - Fecal Coliform (47168)
    - Total Coliform (47169)

- **Pacific Ocean at Waddell Creek Beach**
    - Enterococcus (38965)
    - Fecal Coliform (38391)

- **Pajaro River**
    - Alachlor (51703)
    - Alkalinity as CaCO3 (53810)
    - Ammonia (41037)
    - Anthracene (40986)
    - Arsenic (41632)
    - Atrazine (53672)
    - Benzo(a)anthracene (41383)
    - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41645)
    - Bifenthrin (53673)
    - Butylate (53674)
    - Cadmium (41226)
    - Carbaryl (53719)
    - Carbofuran (41227)
    - Chlorophyll-a (41668)
    - Chlorothalonil (53747)

- Chrysene (C1-C4) (41740)
- Copper (41671)
- Cyfluthrin (54295)
- Cyhalothrin, Lambda (54296)
- Cypermethrin (54297)
- Deltamethrin (54298)
- Disulfoton (53817)
- Endrin (41700)
- Esfenvalerate/Fenvalerate (53818)
- Ethalfluralin (53819)
- Fenpropathrin (53820)
- Fipronil (53821)
- Fipronil Sulfide (53822)
- Fipronil Sulfone (53823)
- Fluoranthene (41250)
- Fluorene (41309)
- Hexazinone (53824)
- Iprodione (53825)
- Lead (41713)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (53837)
- Malathion (53829)
- Mercury (41717)
- Methidathion (54299)
- Methyl Parathion (54300)
- Molinate (54301)
- Naphthalene (41733)
- Napropamide (54302)
- Nickel (41734)
- Nitrogen, Nitrite (53995)
- PAHs (Polycyclic Aromatic Hydrocarbons) (53838)
- Pentachlorobenzene (PCNB) (53839)
- Permethrin, total (54303)
- Phenanthrene (41764)
- Phosmet (54304)
- Prometryn (54305)
- Propanil (DCPA mono- and di-acid degrad) (54306)
- Propiconazole (54307)
- Pyrene (41825)
- Resmethrin (54308)
- Simazine (54309)
- Specific Conductivity (41699)
- Temperature, water (41756)
- Thiobencarb/Bolero (53998)
- Trifluralin (53997)
- Vinclozolin (54310)
- Zinc (41761)

- **Pajaro River Estuary**
  - Alachlor (53795)
  - Atrazine (53796)
  - Bifenthrin (53797)
  - Butylate (53798)
  - Carbaryl (53799)
  - Carbofuran (53800)
  - Chlorothalonil (54037)
  - Chlorpyrifos (40731)
  - Cyfluthrin (53801)
  - Cyhalothrin, Lambda (53802)
  - Cypermethrin (53803)
  - DDD (Dichlorodiphenyldichloroethane) (54110)

- DDT (Dichlorodiphenyltrichloroethane) (53804)
- Deltamethrin (53805)
- Disulfoton (54066)
- Esfenvalerate (54042)
- Ethalfluralin (54043)
- Fenpropathrin (54044)
- Fipronil (54045)
- Fipronil Sulfide (54046)
- Fipronil Sulfone (54047)
- Hexazinone (54048)
- Iprodione (54049)
- Methidathion (54051)
- Methyl Parathion (54052)
- Molinate (54053)
- Napropamide (54054)
- Pentachlorobenzene (PCNB) (54055)
- Permethrin, total (54056)
- Phosmet (54057)
- Prometryn (54058)
- Propanil (DCPA mono- and di-acid degrad) (54059)
- Propiconazole (54060)
- Resmethrin (54061)
- Simazine (54062)
- Thiobencarb/Bolero (54063)
- Trifluralin (54064)
- Vinclozolin (54065)

- **Pancho Rico Creek**
  - Electrical Conductivity (40974)

- **Pennington Creek**
  - Nitrate (41205)
  - Oxygen, Dissolved (41779)
  - Specific Conductivity (49115)
  - Temperature, water (41618)
  - Turbidity (41669)
  - pH (41670)

- **Pico Creek**
  - Ammonia (41257)
  - Boron (41214)
  - Chloride (41215)
  - Chlorophyll-a (41166)
  - Escherichia coli (E. coli) (47354)
  - Fecal Coliform (41304)
  - Nitrate (41305)
  - Nitrogen, Nitrite (52200)
  - Sodium (41339)
  - Specific Conductivity (41258)
  - Temperature, water (41274)
  - Turbidity (41208)
  - pH (41306)

- **Pinto Lake**
  - Aldrin (50528)
  - Chlordane (50534)
  - Chlorpyrifos (47888)
  - Diazinon (47176)
  - Dieldrin (50535)

- Endrin (50536)
- Escherichia coli (E. coli) (47355)
- Ethion (50537)
- Heptachlor (50538)
- Heptachlor epoxide (50539)
- Hexachlorobenzene/ HCB (50540)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (50541)
- Mercury (41301)
- Mirex (50594)
- Nitrate (40891)
- Nitrogen, Nitrite (49159)
- PAHs (Polycyclic Aromatic Hydrocarbons) (50595)
- PCBs (Polychlorinated biphenyls) (50596)
- Selenium (50597)
- alpha-Endosulfan (Endosulfan 1) (50529)

- **Pismo Creek**
  - Ammonia (40828)
  - Benthic Community Effects (52475)
  - Boron (40772)
  - Chlorophyll-a (40870)
  - Nitrate (40239)
  - Nitrogen, Nitrite (49191)
  - Temperature, water (40023)
  - Toxicity (41554)
  - pH (40231)

- **Port San Luis**
  - Aldrin (50600)
  - Cadmium (40859)
  - Chlordane (50662)
  - Chlorpyrifos (47889)
  - DDT (Dichlorodiphenyltrichloroethane) (50732)
  - Diazinon (47177)
  - Endosulfan (50676)
  - Endrin (40523)
  - Heptachlor (50678)
  - Heptachlor epoxide (50679)
  - Hexachlorobenzene/ HCB (50681)
  - Hexachlorocyclohexane (HCH) (50715)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (50722)
  - Mercury (40500)
  - Mirex (50723)
  - Selenium (50729)
  - Toxaphene (50735)
  - Tributyltin TBT (Tributylstanne) (50736)

- **Prefumo Creek**
  - Ammonia (41344)
  - Azinphos-methyl (Guthion) (49197)
  - Boron (40913)
  - Chloride (40725)
  - Chlorophyll-a (40884)
  - Chlorpyrifos (47890)
  - Demeton (49198)
  - Diazinon (47178)
  - Dichlorvos (49199)
  - Dimethoate (49200)
  - Disulfoton (49201)

Escherichia coli (E. coli) (47356)
- Ethoprop (49203)
- Malathion (49204)
- Methidathion (49206)
- Methyl Parathion (49207)
- Nitrogen, Nitrite (49208)
- Parathion (49209)
- Phorate (49210)
- Phosmet (49211)
- Sodium (40836)
- Specific Conductivity (40739)
- Temperature, water (40595)
- pH (40077)

- **Quail Creek**
  - Bifenthrin (49245)
  - Chlorophyll-a (40681)
  - Cyfluthrin (49246)
  - Cyhalothrin, Lambda (49247)
  - Cypermethrin (49248)
  - Demeton (49251)
  - Dichlorvos (49252)
  - Disulfoton (49254)
  - Dyfonate (Fonofos or Fonophos) (49255)
  - Esfenvalerate/Fenvalerate (49256)
  - Ethoprop (49259)
  - Fenamiphos (49257)
  - Methidathion (49261)
  - Methyl Parathion (49258)
  - Phorate (49262)
  - pH (40815)

- **Rattlesnake Creek (Santa Barbara County), unnamed tributary at Las Canoas Road**
  - Toxicity (49264)

- **Rincon Creek**
  - Ammonia (40639)
  - Benthic Community Effects (52476)
  - Chlorophyll-a (40898)
  - Chlorpyrifos (40881)
  - Diazinon (40880)
  - Nitrogen, Nitrite (49265)
  - Specific Conductivity (40925)
  - Temperature, water (40644)
  - pH (40690)

- **Romero Creek**
  - Ammonia (40638)
  - Chlorophyll-a (40603)
  - Escherichia coli (E. coli) (48812)
  - Fecal Coliform (40555)
  - Nitrate (40678)
  - Oxygen, Dissolved (40606)
  - Turbidity (40488)

- **Salinas Reclamation Canal**
  - Bifenthrin (49316)
  - Chlorophyll-a (40835)
  - Cyfluthrin (49317)

- Cyhalothrin, Lambda (49318)
- Cypermethrin (49319)
- Demeton (49325)
- Dichlorvos (49327)
- Dimethoate (49328)
- Dyfonate (Fonofos or Fonophos) (49320)
- Esfenvalerate/Fenvalerate (49321)
- Ethoprop (49329)
- Fenamiphos (49323)
- Methidathion (49324)
- Methyl Parathion (49330)
- Phorate (49331)

- **Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)**
  - Alachlor (49488)
  - Ammonia (34754)
  - Anthracene (40295)
  - Arsenic (40281)
  - Atrazine (49521)
  - Benzo(a)anthracene (40310)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (40282)
  - Bifenthrin (49576)
  - Boron (40311)
  - Butylate (49578)
  - Cadmium (40297)
  - Carbaryl (49523)
  - Carbofuran (40298)
  - Chlorophyll-a (39623)
  - Chlorothalonil (49524)
  - Chromium (40142)
  - Chrysene (C1-C4) (40251)
  - Copper (40454)
  - Cyfluthrin (49579)
  - Cyhalothrin, Lambda (49580)
  - Cypermethrin (49586)
  - DDD (Dichlorodiphenyldichloroethane) (49403)
  - Deltamethrin (49587)
  - Demeton (49590)
  - Dichlorvos (49588)
  - Dimethoate (49591)
  - Disulfoton (49592)
  - Dyfonate (Fonofos or Fonophos) (49540)
  - Endrin (40262)
  - Esfenvalerate/Fenvalerate (49594)
  - Ethalfluralin (49596)
  - Ethoprop (49597)
  - Fenamiphos (49537)
  - Fenpropathrin (49599)
  - Fipronil (49603)
  - Fipronil Sulfide (49604)
  - Fipronil Sulfone (49605)
  - Fluoranthene (40926)
  - Fluorene (40927)
  - Hexazinone (49528)
  - Iprodione (51987)
  - Lead (40942)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (49607)
  - Malathion (49609)
  - Mercury (40755)
  - Methidathion (49612)

- Methyl Parathion (49600)
- Molinate (49531)
- Naphthalene (40768)
- Napropamide (49533)
- Nickel (40757)
- Nitrogen, Nitrite (49601)
- Oxygen, Dissolved (40195)
- PAHs (Polycyclic Aromatic Hydrocarbons) (49608)
- Pentachlorobenzene (PCNB) (49534)
- Permethrin, total (49602)
- Phenanthrene (40748)
- Phorate (49613)
- Phosmet (49541)
- Prometryn (49543)
- Propanil (DCPA mono- and di-acid degrad) (49545)
- Propiconazole (49547)
- Pyrene (40790)
- Resmethrin (49567)
- Simazine (49570)
- Temperature, water (40873)
- Thiobencarb/Bolero (49572)
- Trifluralin (49573)
- Vinclozolin (49574)
- Zinc (40734)

- **Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)**
  - Alkalinity as CaCO3 (50139)
  - Ammonia (40046)
  - Azinphos-methyl (Guthion) (50140)
  - Benthic Community Effects (50153)
  - Boron (39831)
  - Chloride (39689)
  - Chlorophyll-a (39849)
  - Chlorpyrifos (39862)
  - Demeton (50141)
  - Diazinon (40141)
  - Dichlorvos (50142)
  - Dimethoate (50145)
  - Disulfoton (50154)
  - Ethoprop (50143)
  - Malathion (50147)
  - Methidathion (50148)
  - Methyl Parathion (50149)
  - Nitrate (40071)
  - Nitrogen, Nitrite (50155)
  - Oxygen, Dissolved (40098)
  - Parathion (50144)
  - Phorate (50150)
  - Phosmet (50151)
  - Sodium (49656)
  - Specific Conductivity (40113)
  - Total Dissolved Solids (40134)

- **Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)**
  - Ammonia (40063)
  - Boron (40325)
  - Chlorophyll-a (40254)
  - Escherichia coli (E. coli) (40340)
  - Fecal Coliform (40392)
  - Nitrate (40283)

- Nitrogen, Nitrite (50171)
- Oxygen, Dissolved (40327)
- Specific Conductivity (40328)
- Temperature, water (40219)
- Total Dissolved Solids (50176)
- Toxicity (40100)

- **Salinas River Lagoon (North)**
  - Alachlor (51701)
  - Atrazine (51716)
  - Bifenthrin (51790)
  - Butylate (51722)
  - Carbaryl (51794)
  - Carbofuran (51796)
  - Chlorothalonil (51803)
  - Cyfluthrin (51815)
  - Cyhalothrin, Lambda (51816)
  - Cypermethrin (51821)
  - DDD (Dichlorodiphenyldichloroethane) (53529)
  - DDT (Dichlorodiphenyltrichloroethane) (51824)
  - Deltamethrin (51833)
  - Diazinon (47227)
  - Disulfoton (51866)
  - Esfenvalerate/Fenvalerate (51883)
  - Ethalfluralin (51884)
  - Fenpropathrin (51899)
  - Fipronil (51962)
  - Fipronil Sulfide (51966)
  - Fipronil Sulfone (51975)
  - Hexazinone (51985)
  - Iprodione (51988)
  - Malathion (51999)
  - Methidathion (52019)
  - Methyl Parathion (52048)
  - Molinate (52063)
  - Napropamide (52065)
  - Oxygen, Dissolved (52382)
  - Pentachlorobenzene (PCNB) (52101)
  - Permethrin, total (52147)
  - Phosmet (52162)
  - Prometryn (52281)
  - Propanil (DCPA mono- and di-acid degrad) (52290)
  - Propiconazole (52297)
  - Resmethrin (52302)
  - Simazine (52304)
  - Thiobencarb/Bolero (52309)
  - Trifluralin (52313)
  - Vinclozolin (52317)

- **Salmon Creek**
  - Ammonia (50179)
  - Chlorophyll-a (50180)
  - Escherichia coli (E. coli) (48820)
  - Fecal Coliform (48821)
  - Nitrate (53075)
  - Oxygen, Dissolved (50183)
  - Temperature, water (50181)
  - Turbidity (50182)
  - pH (50184)

- **Salsipuedes Creek (Santa Barbara County)**
  - Ammonia (39616)
  - Boron (39918)
  - Chlorophyll-a (39323)
  - Escherichia coli (E. coli) (48822)
  - Nitrate (39203)
  - Nitrogen, Nitrite (50690)
  - Oxygen, Dissolved (40001)
  - Specific Conductivity (39201)
  - Temperature, water (39260)
  - pH (39668)

- **Salsipuedes Creek (Santa Cruz County)**
  - Ammonia (39820)
  - Chlorophyll-a (39833)
  - Nitrogen, Nitrite (50814)
  - Specific Conductivity (39966)
  - Temperature, water (39928)

- **San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)**
  - Arsenic (39930)
  - Benthic Community Effects (52478)
  - Bifenthrin (51562)
  - Cadmium (39878)
  - Chlordane (51327)
  - Chlorophyll-a (39340)
  - Chromium (39329)
  - Copper (39984)
  - Cyfluthrin (51563)
  - Cyhalothrin, Lambda (51564)
  - Cypermethrin (51565)
  - DDD (Dichlorodiphenyldichloroethane) (51331)
  - DDE (Dichlorodiphenyldichloroethylene) (51332)
  - DDT (Dichlorodiphenyltrichloroethane) (51333)
  - Deltamethrin (51334)
  - Diazinon (39214)
  - Dieldrin (39795)
  - Endrin (39810)
  - Esfenvalerate/Fenvalerate (51566)
  - Fenpropathrin (51654)
  - Lead (39735)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51335)
  - Mercury (39537)
  - Methyl Parathion (51337)
  - Nickel (39549)
  - PCBs (Polychlorinated biphenyls) (51338)
  - Permethrin, total (51567)
  - Specific Conductivity (39584)
  - Temperature, water (39096)
  - Toxicity (39583)
  - Turbidity (39106)
  - Zinc (39815)
  - pH (39876)

- **San Antonio Reservoir**
  - Aldrin (51544)
  - Chlordane (51546)
  - DDT (Dichlorodiphenyltrichloroethane) (51559)
  - Dieldrin (51547)

- Endrin (51548)
- Heptachlor (51549)
- Heptachlor epoxide (51551)
- Hexachlorobenzene/ HCB (51552)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51553)
- Mirex (51555)
- PCBs (Polychlorinated biphenyls) (51556)
- Selenium (51557)
- alpha-Endosulfan (Endosulfan 1) (51545)

- **San Antonio River (above San Antonio Reservoir)**
  - Alkalinity as CaCO3 (51342)
  - Ammonia (51343)
  - Benthic Community Effects (51354)
  - Chloride (51345)
  - Nitrate (51346)
  - Nitrogen, Nitrite (51347)
  - Oxygen, Dissolved (51233)
  - Specific Conductivity (51348)
  - Sulfates (51350)
  - Temperature, water (51351)
  - pH (51352)

- **San Antonio River (below San Antonio Reservoir)**
  - Ammonia (39637)
  - Boron (39496)
  - Chloride (51358)
  - Chlorophyll-a (39497)
  - Nitrate (39205)
  - Nitrogen, Nitrite (51362)
  - Oxygen, Dissolved (39511)
  - Sodium (51360)
  - Specific Conductivity (39242)
  - Total Dissolved Solids (51361)
  - Turbidity (39207)
  - pH (39220)

- **San Benito River**
  - Ammonia (39852)
  - Chlorophyll-a (39784)
  - Oxygen, Dissolved (39749)
  - Turbidity (39217)

- **San Bernardo Creek**
  - Enterococcus (48909)
  - Nitrate (39922)
  - Oxygen, Dissolved (39923)
  - Specific Conductivity (39579)
  - Temperature, water (39870)
  - Turbidity (39756)
  - pH (39805)

- **San Carpoforo Creek**
  - Ammonia (39834)
  - Benthic Community Effects (52510)
  - Boron (39768)
  - Chloride (39592)
  - Chlorophyll-a (39956)
  - Escherichia coli (E. coli) (39633)

- Fecal Coliform (39693)
- Nitrate (39694)
- Nitrogen, Nitrite (53466)
- Oxygen, Dissolved (39957)
- Sodium (39607)
- Specific Conductivity (39970)
- Temperature, water (39608)
- Turbidity (39565)
- pH (39911)

- **San Jose Creek (Monterey County)**
  - Ammonia (39980)
  - Boron (39710)
  - Chloride (39766)
  - Chlorophyll-a (39767)
  - Chlorpyrifos (48001)
  - Diazinon (47232)
  - Escherichia coli (E. coli) (39826)
  - Fecal Coliform (39123)
  - Nitrate (39293)
  - Nitrogen, Nitrite (53467)
  - Oxygen, Dissolved (39854)
  - Sodium (39733)
  - Specific Conductivity (39901)
  - Temperature, water (39925)
  - Toxicity (53468)
  - Turbidity (39842)
  - pH (36596)

- **San Jose Creek (Santa Barbara County)**
  - Ammonia (38132)
  - Boron (38248)
  - Chlorophyll-a (40010)
  - Nitrate (39800)
  - Nitrogen, Nitrite (53469)
  - Oxygen, Dissolved (39931)
  - Toxicity (39979)
  - Turbidity (39998)

- **San Juan Creek (San Benito County)**
  - Ammonia (39559)
  - Chlorophyll-a (38382)
  - Temperature, water (38027)
  - pH (37711)

- **San Juan Creek, West Branch (San Benito County)**
  - Chlorophyll-a (53192)
  - Oxygen, Dissolved (52175)
  - Temperature, water (53194)
  - Toxicity (53195)
  - Turbidity (53196)
  - pH (53197)

- **San Lorenzo Creek (Monterey County)**
  - Ammonia (39699)
  - Chlorophyll-a (37782)
  - Nitrate (37856)
  - Nitrogen, Nitrite (53472)

Oxygen, Dissolved (37829)
  - Turbidity (37846)

- **San Lorenzo River**
  - Ammonia (39573)
  - Boron (38152)
  - Chlorophyll-a (38463)
  - Nitrogen, Nitrite (52211)
  - Oxygen, Dissolved (37743)
  - Specific Conductivity (38369)
  - Turbidity (38330)
  - pH (37719)

- **San Luis Obispo Creek (above Osos Street)**
  - Ammonia (39606)
  - Benthic Community Effects (52521)
  - Boron (37655)
  - Chloride (53473)
  - Chlorophyll-a (38145)
  - Escherichia coli (E. coli) (49894)
  - Nitrogen, Nitrite (53475)
  - Oxygen, Dissolved (38331)
  - Sodium (53474)
  - Specific Conductivity (38466)
  - Temperature, water (37820)
  - Turbidity (38324)
  - pH (38326)

- **San Luis Obispo Creek (below Osos Street)**
  - Ammonia (39960)
  - Arsenic (37805)
  - Bifenthrin (51574)
  - Boron (38282)
  - Cadmium (38175)
  - Chlordane (51798)
  - Chlorophyll-a (38447)
  - Chromium (37718)
  - Copper (37767)
  - Cyfluthrin (51575)
  - Cyhalothrin, Lambda (51576)
  - Cypermethrin (51577)
  - DDD (Dichlorodiphenyldichloroethane) (53477)
  - DDE (Dichlorodiphenyldichloroethylene) (53478)
  - DDT (Dichlorodiphenyltrichloroethane) (53476)
  - Deltamethrin (51578)
  - Diazinon (41928)
  - Dieldrin (42024)
  - Endrin (41839)
  - Esfenvalerate/Fenvalerate (51580)
  - Fenpropathrin (51581)
  - Lead (37721)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51992)
  - Mercury (39442)
  - Methyl Parathion (52050)
  - Nickel (39443)
  - Nitrogen, Nitrite (53479)
  - PCBs (Polychlorinated biphenyls) (52094)
  - Permethrin, total (51583)
  - Specific Conductivity (38448)

Temperature, water (38146)
- Toxicity (37803)
- Turbidity (38288)
- Zinc (37798)
- pH (38147)

- **San Luisito Creek**
  - Nitrate (53005)
  - Oxygen, Dissolved (51235)
  - Specific Conductivity (53006)
  - Temperature, water (53007)
  - Turbidity (53004)
  - pH (53008)

- **San Miguelito Creek**
  - Ammonia (39682)
  - Boron (38526)
  - Chlorophyll-a (38246)
  - Escherichia coli (E. coli) (48824)
  - Nitrogen, Nitrite (53480)
  - Specific Conductivity (38247)
  - Turbidity (37710)

- **San Pedro Creek (Santa Barbara County)**
  - Ammonia (39938)
  - Boron (37795)
  - Chloride (37667)
  - Chlorophyll-a (39926)
  - Nitrate (37764)
  - Nitrogen, Nitrite (53481)
  - Oxygen, Dissolved (38694)
  - Specific Conductivity (37681)
  - Toxicity (37837)
  - Turbidity (37802)

- **San Simeon Creek**
  - Ammonia (38639)
  - Benthic Community Effects (52527)
  - Boron (38398)
  - Chlorophyll-a (38682)
  - Chlorpyrifos (41887)
  - Diazinon (42622)
  - Escherichia coli (E. coli) (37791)
  - Fecal Coliform (37748)
  - Nitrogen, Nitrite (52960)
  - Specific Conductivity (37790)
  - Temperature, water (37656)
  - Toxicity (38760)
  - Turbidity (37657)
  - pH (37707)

- **San Ysidro Creek**
  - Ammonia (39434)
  - Chlorophyll-a (38213)
  - Escherichia coli (E. coli) (48825)
  - Fecal Coliform (37810)
  - Nitrate (38437)
  - Oxygen, Dissolved (38200)
  - Turbidity (38212)

- pH (38179)

- **Sandy Creek**
  - Alkalinity as CaCO3 (53207)
  - Ammonia (53203)
  - Benthic Community Effects (52752)
  - Nitrate (53483)
  - Nitrogen, Nitrite (53482)
  - Oxygen, Dissolved (51237)
  - Temperature, water (53212)
  - pH (53204)

- **Santa Barbara Harbor**
  - Aldrin (50753)
  - Cadmium (42477)
  - Chlordane (50761)
  - Chlorpyrifos (48228)
  - DDT (Dichlorodiphenyltrichloroethane) (50793)
  - Diazinon (47238)
  - Endosulfan (50765)
  - Endrin (42490)
  - Heptachlor (50770)
  - Heptachlor epoxide (50773)
  - Hexachlorobenzene/ HCB (50775)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (50781)
  - Mercury (42323)
  - Mirex (50783)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (50785)
  - PCBs (Polychlorinated biphenyls) (50786)
  - Selenium (50791)
  - Toxaphene (50794)
  - Tributyltin TBT (Tributylstanne) (50795)
  - Zinc (42624)
  - pH (53214)

- **Santa Cruz Harbor**
  - Aldrin (50996)
  - Cadmium (42005)
  - Chlordane (50997)
  - Chlorpyrifos (48229)
  - DDT (Dichlorodiphenyltrichloroethane) (51096)
  - Diazinon (47239)
  - Endosulfan (50998)
  - Endrin (42526)
  - Heptachlor (50999)
  - Heptachlor epoxide (51000)
  - Hexachlorobenzene/ HCB (51001)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51002)
  - Mercury (42509)
  - Mirex (51003)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (51004)
  - Selenium (51095)
  - Toxaphene (51099)
  - Tributyltin TBT (Tributylstanne) (51100)
  - Zinc (42577)
  - pH (53216)

- **Santa Margarita Lake**
  - Aldrin (51568)

- Chlordane (51570)
- DDT (Dichlorodiphenyltrichloroethane) (51609)
- Dieldrin (51571)
- Endrin (51572)
- Heptachlor (51573)
- Heptachlor epoxide (51579)
- Hexachlorobenzene/ HCB (51582)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51584)
- Mercury (51593)
- Mirex (51596)
- PCBs (Polychlorinated biphenyls) (51600)
- Selenium (51602)
- alpha-Endosulfan (Endosulfan 1) (51569)

- **Santa Maria River**
  - Anthracene (37581)
  - Arsenic (37395)
  - Azinphos-methyl (Guthion) (51230)
  - Benzo(a)anthracene (37713)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (37508)
  - Bifenthrin (51236)
  - Boron (38328)
  - Cadmium (37891)
  - Chlordane (51240)
  - Chlorophyll-a (39478)
  - Chromium (37950)
  - Chrysene (C1-C4) (37951)
  - Copper (37878)
  - Cyfluthrin (51248)
  - Cyhalothrin, Lambda (51251)
  - Deltamethrin (51289)
  - Demeton (51290)
  - Dichlorvos (51292)
  - Dimethoate (51853)
  - Disulfoton (51869)
  - Esfenvalerate/Fenvalerate (51597)
  - Ethoprop (51892)
  - Fenpropathrin (51598)
  - Fluoranthene (37639)
  - Fluorene (38196)
  - Lead (38256)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51993)
  - Mercury (38148)
  - Methidathion (52020)
  - Methyl Parathion (52051)
  - Naphthalene (38137)
  - Nickel (38153)
  - Nitrogen, Nitrite (53040)
  - Oxygen, Dissolved (38255)
  - PAHs (Polycyclic Aromatic Hydrocarbons) (32722)
  - PCBs (Polychlorinated biphenyls) (52095)
  - Parathion (52088)
  - Permethrin, total (51599)
  - Phenanthrene (38168)
  - Phorate (52149)
  - Phosmet (52166)
  - Pyrene (38339)
  - Specific Conductivity (38435)
  - Temperature, water (38206)
  - Zinc (38582)

- pH (38221)

- **Santa Maria River Estuary**
  - Alachlor (51702)
  - Atrazine (51717)
  - Bifenthrin (51585)
  - Butylate (51723)
  - Carbaryl (51795)
  - Carbofuran (51797)
  - Chlorothalonil (51804)
  - Cyfluthrin (51586)
  - Cyhalothrin, Lambda (51587)
  - Cypermethrin (51588)
  - DDT (Dichlorodiphenyltrichloroethane) (53050)
  - Deltamethrin (51589)
  - Disulfoton (51872)
  - Esfenvalerate/Fenvalerate (51590)
  - Ethalfluralin (51591)
  - Fenpropathrin (51594)
  - Fipronil (51964)
  - Fipronil Sulfide (51971)
  - Fipronil Sulfone (51977)
  - Hexazinone (51986)
  - Iprodione (51989)
  - Methidathion (52042)
  - Methyl Parathion (52058)
  - Molinate (52064)
  - Napropamide (52066)
  - Pentachlorobenzene (PCNB) (52102)
  - Permethrin, total (51595)
  - Phosmet (52169)
  - Prometryn (52288)
  - Propanil (DCPA mono- and di-acid degrad) (52292)
  - Propiconazole (52299)
  - Resmethrin (52303)
  - Simazine (52308)
  - Thiobencarb/Bolero (52310)
  - Trifluralin (52315)
  - Vinclozolin (52320)

- **Santa Monica Creek**
  - Ammonia (38731)
  - Boron (38069)
  - Chloride (38070)
  - Chlorophyll-a (38732)
  - Chlorpyrifos (42327)
  - Diazinon (42366)
  - Escherichia coli (E. coli) (48826)
  - Nitrate (37690)
  - Nitrogen, Nitrite (53534)
  - Oxygen, Dissolved (37255)
  - Sodium (37309)
  - Specific Conductivity (38067)
  - Temperature, water (37642)
  - Toxicity (37702)
  - Turbidity (39459)

- **Santa Rita Creek (Monterey County)**
  - Boron (37495)

Chloride (37553)
- Chlorophyll-a (38676)
- Nitrogen, Nitrite (53094)
- Specific Conductivity (37512)
- Temperature, water (37127)
- pH (37128)

- **Santa Rosa Creek (San Luis Obispo County)**
  - Ammonia (39251)
  - Benthic Community Effects (52753)
  - Boron (37771)
  - Chloride (53103)
  - Chlorophyll-a (38718)
  - Chlorpyrifos (42475)
  - Diazinon (42523)
  - Escherichia coli (E. coli) (37772)
  - Nitrate (38031)
  - Nitrogen, Nitrite (53110)
  - Oxygen, Dissolved (38032)
  - Sodium (53106)
  - Specific Conductivity (42524)
  - Toxicity (38713)
  - Turbidity (39239)
  - pH (37961)

- **Santa Ynez River (Cachuma Lake to below city of Lompoc)**
  - Ammonia (39319)
  - Benthic Community Effects (52758)
  - Boron (38083)
  - Chloride (38344)
  - Chlorophyll-a (39489)
  - Escherichia coli (E. coli) (48828)
  - Fecal Coliform (37991)
  - Nitrate (37992)
  - Nitrogen, Nitrite (52958)
  - Oxygen, Dissolved (37370)
  - Specific Conductivity (38046)
  - Turbidity (38692)
  - pH (37957)

- **Santa Ynez River (above Lake Cachuma)**
  - Ammonia (39481)
  - Benthic Community Effects (52756)
  - Boron (37312)
  - Chloride (37364)
  - Chlorophyll-a (39494)
  - Escherichia coli (E. coli) (48827)
  - Fecal Coliform (37337)
  - Nitrate (37388)
  - Nitrogen, Nitrite (53484)
  - Oxygen, Dissolved (37328)
  - Sodium (37266)
  - Specific Conductivity (37198)
  - Turbidity (39250)
  - pH (37941)

- **Santa Ynez River (below city of Lompoc to Ocean)**
  - Ammonia (39479)
  - Azinphos-methyl (Guthion) (51719)

- Benthic Community Effects (57095)
- Boron (37171)
- Chlorophyll-a (39526)
- Chlorpyrifos (44541)
- Demeton (51834)
- Diazinon (42527)
- Dichlorvos (51845)
- Dimethoate (51855)
- Disulfoton (51873)
- Ethoprop (51894)
- Malathion (52006)
- Methidathion (52044)
- Methyl Parathion (52059)
- Nitrogen, Nitrite (52926)
- Parathion (52092)
- Phorate (52150)
- Phosmet (52278)
- Specific Conductivity (37945)
- Turbidity (39475)

- **Scott Creek**
  - Boron (37933)
  - Chloride (37195)
  - Escherichia coli (E. coli) (37185)
  - Fecal Coliform (37297)
  - Sodium (38033)

- **Scott Creek (Santa Cruz County)**
  - Ammonia (53423)
  - Boron (53424)
  - Chloride (53425)
  - Chlorophyll-a (53426)
  - Escherichia coli (E. coli) (53431)
  - Fecal Coliform (53432)
  - Nitrate (53434)
  - Oxygen, Dissolved (53429)
  - Sodium (53427)
  - Specific Conductivity (53430)
  - Temperature, water (53433)
  - Turbidity (53428)
  - pH (53435)

- **Scott Creek Lagoon**
  - Ammonia (50863)
  - Boron (50837)
  - Chlorophyll-a (50920)
  - Enterococcus (50834)
  - Escherichia coli (E. coli) (50852)
  - Fecal Coliform (50873)
  - Nitrate (50883)
  - Nitrogen, Nitrite (53379)
  - Oxygen, Dissolved (50818)
  - Specific Conductivity (50874)
  - Temperature, water (50843)
  - Turbidity (50850)
  - pH (50820)

- **Sisquoc River**
  - Ammonia (38904)

- Boron (37030)
- Chloride (53173)
- Chlorophyll-a (39348)
- Escherichia coli (E. coli) (48829)
- Fecal Coliform (37101)
- Nitrate (38007)
- Nitrogen, Nitrite (53498)
- Oxygen, Dissolved (39353)
- Sodium (53499)
- Specific Conductivity (37057)
- Temperature, water (37913)
- Turbidity (39401)

- **Sloans Canyon Creek**
  - Chlorophyll-a (53218)
  - Nitrate (53226)
  - Oxygen, Dissolved (52421)

- **Soquel Creek**
  - Ammonia (39195)
  - Arsenic (51715)
  - Bifenthrin (51603)
  - Boron (36607)
  - Cadmium (51793)
  - Chlordane (51799)
  - Chloride (36608)
  - Chlorophyll-a (39134)
  - Chlorpyrifos (48913)
  - Chromium (51805)
  - Copper (51814)
  - Cyfluthrin (51604)
  - Cyhalothrin, Lambda (51605)
  - Cypermethrin (51606)
  - DDD (Dichlorodiphenyldichloroethane) (53500)
  - DDE (Dichlorodiphenyldichloroethylene) (53501)
  - DDT (Dichlorodiphenyltrichloroethane) (53502)
  - Deltamethrin (51607)
  - Diazinon (47358)
  - Dieldrin (51851)
  - Endrin (51880)
  - Esfenvalerate/Fenvalerate (51608)
  - Fenpropathrin (51610)
  - Lead (51991)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51994)
  - Mercury (52015)
  - Methyl Parathion (52060)
  - Nickel (52067)
  - Nitrate (36942)
  - Nitrogen, Nitrite (53503)
  - Oxygen, Dissolved (36943)
  - PCBs (Polychlorinated biphenyls) (52097)
  - Permethrin, total (51611)
  - Sodium (36849)
  - Specific Conductivity (36828)
  - Temperature, water (36850)
  - Toxicity (53504)
  - Zinc (52329)
  - pH (37040)

Stenner Creek
- Ammonia (37251)
- Benthic Community Effects (52759)
- Boron (37253)
- Chloride (36990)
- Chlorophyll-a (39428)
- Chlorpyrifos (48916)
- Diazinon (47359)
- Nitrate (37757)
- Nitrogen, Nitrite (53505)
- Oxygen, Dissolved (37463)
- Sodium (36793)
- Specific Conductivity (36644)
- Temperature, water (36794)
- Toxicity (53507)
- Turbidity (39486)

- **Struve Slough**
  - Ammonia (37250)
  - Nitrate (53488)

- **Sycamore Creek**
  - Ammonia (36675)
  - Boron (36788)
  - Chlorophyll-a (38627)
  - Chlorpyrifos (42602)
  - Diazinon (42593)
  - Escherichia coli (E. coli) (48831)
  - Nitrate (36848)
  - Nitrogen, Nitrite (53509)
  - Specific Conductivity (36868)
  - Temperature, water (37503)
  - Toxicity (39389)

- **Tecolote Creek (Santa Barbara County)**
  - Ammonia (36978)
  - Boron (36697)
  - Chlorophyll-a (39347)
  - Escherichia coli (E. coli) (48832)
  - Nitrate (37441)
  - Nitrogen, Nitrite (53510)
  - Oxygen, Dissolved (36785)
  - Specific Conductivity (37452)
  - Temperature, water (36649)
  - Turbidity (39332)
  - pH (36660)

- **Tecolotito Creek**
  - Ammonia (52601)
  - Arsenic (52529)
  - Boron (52725)
  - Chlorophyll-a (52558)
  - Oxygen, Dissolved (52652)
  - Specific Conductivity (52610)
  - Temperature, water (52619)
  - Turbidity (52577)
  - pH (52739)

- **Tembladero Slough**

- Arsenic (36677)
- Bifenthrin (51612)
- Cadmium (36676)
- Chlordane (51800)
- Chromium (36822)
- Copper (37061)
- Cyfluthrin (51613)
- Cyhalothrin, Lambda (51615)
- Cypermethrin (51616)
- DDD (Dichlorodiphenyldichloroethane) (53042)
- DDE (Dichlorodiphenyldichloroethylene) (53043)
- DDT (Dichlorodiphenyltrichloroethane) (53044)
- Deltamethrin (51617)
- Demeton (51838)
- Dichlorvos (51847)
- Dieldrin (42639)
- Dimethoate (51856)
- Endrin (42571)
- Esfenvalerate/Fenvalerate (51618)
- Ethoprop (51896)
- Fenpropathrin (51619)
- Lead (36976)
- Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51996)
- Mercury (36977)
- Methyl Parathion (52061)
- PCBs (Polychlorinated biphenyls) (52098)
- Permethrin, total (51620)
- Phorate (52153)
- Zinc (36883)

- **Toro Canyon Creek**
  - Ammonia (37400)
  - Benthic Community Effects (52760)
  - Chlorophyll-a (39193)
  - Escherichia coli (E. coli) (48833)
  - Nitrate (37514)
  - Oxygen, Dissolved (37504)
  - Turbidity (39140)
  - pH (37527)

- **Toro Creek**
  - Ammonia (37528)
  - Boron (36654)
  - Chloride (36806)
  - Chlorophyll-a (38634)
  - Escherichia coli (E. coli) (48834)
  - Nitrate (36826)
  - Nitrogen, Nitrite (53511)
  - Sodium (37570)
  - Specific Conductivity (36807)
  - Temperature, water (37584)
  - Turbidity (38714)
  - pH (37585)

- **Tularcitos Creek**
  - Ammonia (39447)
  - Boron (36796)
  - Chlorophyll-a (39448)
  - Escherichia coli (E. coli) (50138)

- Nitrate (37576)
- Nitrogen, Nitrite (53512)
- Oxygen, Dissolved (36656)
- Specific Conductivity (37515)
- Temperature, water (36983)
- Turbidity (38657)
- pH (36605)

- **Unnamed tributary to Orcutt Creek**
  - Azinphos-methyl (Guthion) (51721)
  - Bifenthrin (51681)
  - Chlordane (51802)
  - Chlorophyll-a (53252)
  - Cyfluthrin (51682)
  - Cyhalothrin, Lambda (51683)
  - Cypermethrin (51684)
  - DDD (Dichlorodiphenyldichloroethane) (53492)
  - DDE (Dichlorodiphenyldichloroethylene) (53494)
  - DDT (Dichlorodiphenyltrichloroethane) (53491)
  - Deltamethrin (51685)
  - Demeton (51844)
  - Dichlorvos (51849)
  - Dieldrin (51852)
  - Dimethoate (51858)
  - Disulfoton (51874)
  - Endrin (51882)
  - Esfenvalerate/Fenvalerate (51686)
  - Ethoprop (51897)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51998)
  - Malathion (52012)
  - Methidathion (52046)
  - Methyl Parathion (52062)
  - Oxygen, Dissolved (51238)
  - PCBs (Polychlorinated biphenyls) (52099)
  - Parathion (52093)
  - Permethrin, total (51687)
  - Phorate (52155)
  - Phosmet (52279)
  - Temperature, water (53256)
  - pH (53262)

- **Uvas Reservoir**
  - Aldrin (51614)
  - Chlordane (51621)
  - DDT (Dichlorodiphenyltrichloroethane) (51633)
  - Dieldrin (51623)
  - Endrin (51624)
  - Heptachlor (51625)
  - Heptachlor epoxide (51626)
  - Hexachlorobenzene/ HCB (51627)
  - Lindane/gamma Hexachlorocyclohexane (gamma-HCH) (51628)
  - Mirex (51629)
  - PCBs (Polychlorinated biphenyls) (51631)
  - Selenium (51632)
  - alpha-Endosulfan (Endosulfan 1) (51788)

- **Valencia Creek**
  - Alkalinity as CaCO3 (53513)
  - Ammonia (37394)

Nitrate (37000)
- Nitrogen, Nitrite (53514)
- Oxygen, Dissolved (37001)
- Temperature, water (37119)
- pH (37484)

- **Villa Creek**
  - Ammonia (37351)
  - Boron (37602)
  - Chloride (36926)
  - Chlorophyll-a (38951)
  - Escherichia coli (E. coli) (48835)
  - Nitrate (37616)
  - Nitrogen, Nitrite (53516)
  - Oxygen, Dissolved (37617)
  - Sodium (37134)
  - Specific Conductivity (37613)
  - Temperature, water (36204)
  - Turbidity (39015)
  - pH (37344)

- **Waddell Creek**
  - Escherichia coli (E. coli) (37618)
  - Fecal Coliform (37455)

- **Waddell Creek Lagoon**
  - Ammonia (51030)
  - Boron (51031)
  - Chlorophyll-a (51091)
  - Escherichia coli (E. coli) (51054)
  - Fecal Coliform (51087)
  - Nitrate (51025)
  - Nitrogen, Nitrite (53064)
  - Oxygen, Dissolved (51075)
  - Specific Conductivity (51013)
  - Temperature, water (51028)
  - Turbidity (51056)

- **Walters Creek**
  - Escherichia coli (E. coli) (48836)
  - Nitrate (53015)
  - Oxygen, Dissolved (52384)
  - Temperature, water (53016)
  - Turbidity (53017)
  - pH (53018)

- **Warden Creek**
  - Ammonia (36743)
  - Chlorophyll-a (37988)
  - Chlorpyrifos (41835)
  - Diazinon (41845)
  - Enterococcus (48837)
  - Temperature, water (37587)
  - Toxicity (38375)
  - Turbidity (37989)
  - pH (37595)

- **Watsonville Creek**

- Ammonia (37609)
- Chlorophyll-a (37648)
- Temperature, water (37110)
- Turbidity (37923)

- **Watsonville Slough**
  - Alachlor (54001)
  - Ammonia (36360)
  - Atrazine (51718)
  - Bifenthrin (51642)
  - Butylate (51724)
  - Carbaryl (54602)
  - Carbofuran (54191)
  - Chlorophyll-a (37860)
  - Chlorpyrifos (42486)
  - Cyfluthrin (51643)
  - Cyhalothrin, Lambda (51644)
  - Cypermethrin (51646)
  - DDD (Dichlorodiphenyldichloroethane) (54114)
  - DDT (Dichlorodiphenyltrichloroethane) (54029)
  - Deltamethrin (51647)
  - Diazinon (42590)
  - Esfenvalerate/Fenvalerate (51648)
  - Ethalfluralin (51649)
  - Fenpropathrin (54004)
  - Fipronil (54005)
  - Fipronil Sulfide (54006)
  - Fipronil Sulfone (54007)
  - Hexazinone (54009)
  - Methidathion (54011)
  - Methyl Parathion (54012)
  - Molinate (54014)
  - Napropamide (54015)
  - Permethrin, total (51650)
  - Phosmet (54016)
  - Prometryn (54018)
  - Propanil (DCPA mono- and di-acid degrad) (54019)
  - Propiconazole (54020)
  - Simazine (54021)
  - Thiobencarb/Bolero (54022)
  - Trifluralin (54024)
  - pH (37007)

- **Wilder Creek**
  - Specific Conductivity (37482)

- **Willow Creek (Monterey County)**
  - Ammonia (36255)
  - Benthic Community Effects (52761)
  - Chlorophyll-a (38946)
  - Escherichia coli (E. coli) (37012)
  - Fecal Coliform (36395)
  - Nitrate (36278)
  - Oxygen, Dissolved (36160)
  - Temperature, water (36307)
  - Turbidity (38947)

- **Woodrow Creek**
  - Chlorpyrifos (48918)

- Diazinon (47360)
- Toxicity (53517)

- **Zayante Creek**
  - Specific Conductivity (36890)
  - Temperature, water (36291)

List on 303(d) list (TMDL required list) Regional Board 3

- **Alamo Creek**
  - Toxicity (42990)

- **Alisal Creek (Monterey County)**
  - Toxicity (43010)
  - Turbidity (46605)

- **Alisal Slough (Monterey County)**
  - Turbidity (46617)

- **Arroyo Burro Creek**
  - Oxygen, Dissolved (36515)

- **Arroyo Grande Creek (below Lopez Lake)**
  - Benthic Community Effects (46621)
  - Nickel (36565)
  - Nitrate (36995)
  - Toxicity (42396)

- **Arroyo Paredon**
  - Escherichia coli (E. coli) (46661)

- **Atascadero Creek (Santa Barbara County)**
  - Benthic Community Effects (46802)
  - Nitrate (36865)
  - Toxicity (42944)

- **Bennett Slough**
  - Turbidity (37291)

- **Big Creek (Big Sur Coast)**
  - pH (37502)

- **Blanco Drain**
  - DDD (Dichlorodiphenyldichloroethane) (46946)
  - DDE (Dichlorodiphenyldichloroethylene) (46947)

- **Blosser Channel**
  - Temperature, water (36833)
  - Turbidity (42902)

- **Bradley Canyon Creek**
  - Temperature, water (42394)

- **Bradley Channel**
  - Turbidity (42830)
- **Cachuma, Lake**
  - Mercury (47034)
- **Camp Evers Creek**
  - Escherichia coli (E. coli) (48830)
- **Canada Del Capitan**
  - Toxicity (41958)
- **Carneros Creek (Monterey County)**
  - Nitrate (42887)
- **Carneros Creek (Santa Barbara County)**
  - Fecal Coliform (42739)
- **Carpinteria Creek (below Gobernador Creek)**
  - Chloride (50294)
  - Nitrate (50325)
  - Toxicity (50262)
- **Chorro Creek**
  - Benthic Community Effects (47172)
  - Chloride (47173)
  - Toxicity (41982)
- **Chualar Creek**
  - Dimethoate (47185)
  - Malathion (47191)
- **Chualar Creek, South Branch**
  - Temperature, water (47236)
  - Turbidity (39883)
  - pH (39897)
- **Chumash Creek**
  - Escherichia coli (E. coli) (47195)
  - Oxygen, Dissolved (33609)
- **Cuyama River (above Twitchell Reservoir)**
  - Turbidity (38520)
- **Dairy Creek**
  - Enterococcus (47220)
  - Escherichia coli (E. coli) (38985)
- **Elkhorn Slough**
  - Nitrate (53545)
- **Espinosa Slough**
  - Malathion (47244)
- **Estrella River**

- Toxicity (47249)
- Turbidity (39777)

- **Franklin Creek (Santa Barbara County)**
  - Toxicity (42022)

- **Little Oso Flaco Creek**
  - Turbidity (42123)

- **Los Osos Creek (upstream of Los Osos)**
  - Oxygen, Dissolved (47326)

- **Los Osos Creek Estuary**
  - Turbidity (51390)

- **Main Street Channel**
  - Temperature, water (42395)

- **Maria Ygnacio Creek**
  - Turbidity (41425)

- **McGowan Ditch**
  - DDD (Dichlorodiphenyldichloroethane) (48453)
  - DDE (Dichlorodiphenyldichloroethylene) (48454)
  - Malathion (48465)
  - Toxicity (48456)

- **Merrit Ditch**
  - pH (41482)

- **Millers Canal**
  - Toxicity (42175)

- **Monterey Harbor**
  - Arsenic (41157)
  - Copper (42111)
  - Oxygen, Dissolved (49417)
  - PCBs (Polychlorinated biphenyls) (49419)

- **Moro Cojo Slough**
  - Toxicity (41491)
  - Turbidity (40966)

- **Morro Bay**
  - Arsenic (32530)

- **Morro Creek**
  - Fecal Coliform (41090)

- **Moss Landing Harbor**
  - Arsenic (42134)
  - DDT (Dichlorodiphenyltrichloroethane) (49746)
  - Dieldrin (41900)
  - PCBs (Polychlorinated biphenyls) (49739)

- **Nipomo Creek**
  - Temperature, water (41325)
- **Old Creek (above Whale Rock Reservoir)**
  - Escherichia coli (E. coli) (47350)
  - Fecal Coliform (41191)
- **Orcutt Creek**
  - Carbaryl (48771)
- **Oso Flaco Creek**
  - Turbidity (40947)
- **Oso Flaco Lake**
  - Chlorophyll-a (41333)
  - Mercury (49025)
  - Oxygen, Dissolved (44251)
- **Pacific Ocean at Avila Beach (Avila Pier)**
  - Total Coliform (36993)
- **Pacific Ocean at Avila Beach (SLO creek mouth)**
  - Total Coliform (36233)
- **Pacific Ocean at Capitola Beach (Santa Cruz County)**
  - Total Coliform (44646)
- **Pacific Ocean at Cowell Beach (Santa Cruz County)**
  - Fecal Coliform (36659)
  - Total Coliform (37062)
- **Pacific Ocean at Guadalupe Dunes (Santa Barbara County)**
  - Total Coliform (37577)
- **Pacific Ocean at Leadbetter Beach (Santa Barbara County)**
  - Enterococcus (38482)
- **Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk**
  - Total Coliform (37132)
- **Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth**
  - Total Coliform (36609)
- **Pacific Ocean at Mitchells Cove Beach**
  - Total Coliform (37345)
- **Pacific Ocean at Monterey State Beach (Del Monte Beach)**
  - Enterococcus (36783)
  - Total Coliform (37096)
- **Pacific Ocean at Natural Bridges Beach**
  - Total Coliform (37299)
- **Pacific Ocean at New Brighton Beach (Santa Cruz County)**

Total Coliform (37510)

- **Pacific Ocean at Olde Port Beach (131 yards west of restrooms)**
  - Total Coliform (37831)

- **Pacific Ocean at Pismo Beach (San Luis Obispo County)**
  - Enterococcus (47147)
  - Fecal Coliform (47148)
  - Total Coliform (47149)

- **Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave**
  - Total Coliform (42557)

- **Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave**
  - Total Coliform (41983)

- **Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth**
  - Total Coliform (41879)

- **Pacific Ocean at Seabright (Castle) Beach**
  - Total Coliform (38368)

- **Pacific Ocean at Twin Lakes Beach (Santa Cruz County)**
  - Total Coliform (38958)

- **Pacific Ocean at Waddell Creek Beach**
  - Total Coliform (38508)

- **Pajaro River**
  - Chromium (41739)
  - DDE (Dichlorodiphenyldichloroethylene) (53999)
  - DDT (Dichlorodiphenyltrichloroethane) (54000)
  - Toxicity (41443)

- **Pajaro River Estuary**
  - DDE (Dichlorodiphenyldichloroethylene) (54111)
  - Malathion (54050)
  - Oxygen, Dissolved (53806)
  - Temperature, water (53808)
  - Toxicity (53809)
  - pH (53807)

- **Pennington Creek**
  - Escherichia coli (E. coli) (41256)

- **Pinto Lake**
  - Ammonia (40921)
  - DDT (Dichlorodiphenyltrichloroethane) (50598)

- **Pismo Creek**
  - Turbidity (40230)

- **Port San Luis**
  - Arsenic (40886)
  - Dieldrin (40568)

    - PAHs (Polycyclic Aromatic Hydrocarbons) (50724)
    - PCBs (Polychlorinated biphenyls) (50726)

- **Prefumo Creek**
    - Toxicity (41596)

- **Quail Creek**
    - Dimethoate (49253)
    - Malathion (49260)
    - Permethrin, total (49250)

- **Rincon Creek**
    - Nitrate (40809)
    - Oxygen, Dissolved (40557)

- **Salinas Reclamation Canal**
    - Malathion (49332)
    - Permethrin, total (49326)

- **Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)**
    - Benthic Community Effects (52477)
    - DDE (Dichlorodiphenyldichloroethylene) (49404)

- **Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)**
    - Turbidity (40330)

- **Salinas River Lagoon (North)**
    - DDE (Dichlorodiphenyldichloroethylene) (53530)
    - Temperature, water (53531)
    - pH (53191)

- **Salsipuedes Creek (Santa Barbara County)**
    - Fecal Coliform (39202)
    - Turbidity (39270)

- **Salsipuedes Creek (Santa Cruz County)**
    - Nitrate (39365)
    - Toxicity (39237)

- **San Bernardo Creek**
    - Escherichia coli (E. coli) (39580)

- **San Jose Creek (Santa Barbara County)**
    - Temperature, water (39806)

- **San Lorenzo River**
    - Chloride (38522)
    - Sodium (43044)
    - Temperature, water (38279)

- **San Luis Obispo Creek (below Osos Street)**
    - Benthic Community Effects (52523)
    - Escherichia coli (E. coli) (49951)
    - Oxygen, Dissolved (39741)

San Luisito Creek
- Escherichia coli (E. coli) (48823)

- **San Miguelito Creek**
  - Fecal Coliform (38262)
  - Nitrate (37652)
  - Oxygen, Dissolved (38270)
  - Toxicity (38269)

- **Santa Barbara Harbor**
  - Arsenic (42473)
  - Copper (42521)
  - Dieldrin (42481)
  - Oxygen, Dissolved (52414)

- **Santa Cruz Harbor**
  - Arsenic (41909)
  - Copper (42009)
  - Dieldrin (42514)
  - Oxygen, Dissolved (52419)
  - PCBs (Polychlorinated biphenyls) (51005)

- **Santa Maria River Estuary**
  - pH (53053)

- **Santa Rosa Creek (San Luis Obispo County)**
  - Fecal Coliform (37705)
  - Total Dissolved Solids (53108)

- **Santa Ynez River (Cachuma Lake to below city of Lompoc)**
  - Toxicity (38690)

- **Santa Ynez River (above Lake Cachuma)**
  - Temperature, water (37267)
  - Toxicity (39288)

- **Santa Ynez River (below city of Lompoc to Ocean)**
  - Toxicity (39534)
  - pH (37159)

- **Scott Creek Lagoon**
  - Chloride (50893)
  - Sodium (50886)

- **Sisquoc River**
  - pH (37911)

- **Sloans Canyon Creek**
  - Ammonia (53237)
  - Turbidity (53221)
  - pH (53223)

- **Stenner Creek**
  - Escherichia coli (E. coli) (50067)
  - pH (36856)

- **Struve Slough**
  - Chlorophyll-a (38918)
  - Toxicity (38826)
  - Turbidity (39151)

- **Sycamore Creek**
  - Oxygen, Dissolved (36844)
  - Turbidity (38917)
  - pH (36839)

- **Tecolote Creek (Santa Barbara County)**
  - Fecal Coliform (37440)

- **Tembladero Slough**
  - Malathion (52008)
  - Nickel (36924)

- **Tequisquita Slough**
  - Ammonia (36618)
  - Chlorophyll-a (39090)
  - Toxicity (39423)

- **Unnamed tributary to Orcutt Creek**
  - Turbidity (53014)

- **Villa Creek**
  - Fecal Coliform (37615)

- **Waddell Creek Lagoon**
  - Chloride (51015)
  - Sodium (51029)
  - pH (51055)

- **Warden Creek**
  - Escherichia coli (E. coli) (48838)

- **Watsonville Slough**
  - DDE (Dichlorodiphenyldichloroethylene) (54117)
  - Escherichia coli (E. coli) (50173)
  - Malathion (54010)
  - Nitrate (54027)
  - Toxicity (38370)

- **Willow Creek (Monterey County)**
  - pH (36302)

List on 303(d) list (being addressed by USEPA approved TMDL)	Regional Board 3

- **Alisal Creek (Monterey County)**
  - Ammonia (46601)

- **Alisal Slough (Monterey County)**
  - Ammonia (35030)

    - Diazinon (42974)

- **Arana Gulch**
    - Chlorpyrifos (36945)

- **Blanco Drain**
    - Toxicity (42954)

- **Blosser Channel**
    - Chlorpyrifos (42938)
    - Diazinon (42905)

- **Bradley Canyon Creek**
    - Chlorpyrifos (47397)

- **Bradley Channel**
    - Diazinon (42869)
    - Escherichia coli (E. coli) (47315)
    - Malathion (47019)

- **Branciforte Creek**
    - Chlorpyrifos (43008)
    - Enterococcus (37483)
    - Escherichia coli (E. coli) (37525)
    - Fecal Coliform (37516)

- **Carnadero Creek (Uvas Creek below Bloomfield Road)**
    - Escherichia coli (E. coli) (38184)
    - Fecal Coliform (38144)

- **Chorro Creek**
    - Sodium (47174)
    - Total Dissolved Solids (47175)

- **Chualar Creek**
    - Chlorpyrifos (42031)
    - Diazinon (41972)
    - Escherichia coli (E. coli) (38596)
    - Fecal Coliform (39064)
    - Oxygen, Dissolved (38414)

- **Chualar Creek, South Branch**
    - Ammonia (47233)

- **Corralitos Creek**
    - Escherichia coli (E. coli) (38954)

- **Espinosa Lake**
    - Chlorpyrifos (40014)

- **Estrella River**
    - Boron (39157)

- **Greene Valley Creek (Santa Barbara County)**
    - Malathion (47380)

- **Harkins Slough**
  - Indicator Bacteria (41851)

- **La Brea Creek**
  - Fecal Coliform (41281)

- **Llagas Creek (below Chesbro Reservoir)**
  - Chlorpyrifos (41433)

- **Main Street Channel**
  - Escherichia coli (E. coli) (47333)
  - Malathion (48168)
  - Oxygen, Dissolved (42181)

- **Merrit Ditch**
  - Diazinon (42206)

- **Millers Canal**
  - Fecal Coliform (42381)
  - Nitrate (42170)

- **Moro Cojo Slough**
  - Nitrate (52522)

- **Natividad Creek**
  - Diazinon (41077)
  - Escherichia coli (E. coli) (40970)

- **Nipomo Creek**
  - Escherichia coli (E. coli) (47349)

- **Nobel Gulch Creek**
  - Escherichia coli (E. coli) (41318)

- **North Main Street Channel**
  - Nitrate (41171)

- **Orcutt Creek**
  - Cyfluthrin (48797)
  - Cyhalothrin, Lambda (48798)
  - DDD (Dichlorodiphenyldichloroethane) (48800)
  - DDE (Dichlorodiphenyldichloroethylene) (48802)
  - Escherichia coli (E. coli) (47351)
  - Malathion (47311)

- **Oso Flaco Creek**
  - Chlorpyrifos (41808)
  - Malathion (48895)

- **Oso Flaco Lake**
  - DDT (Dichlorodiphenyltrichloroethane) (48954)
  - Endrin (48951)
  - Escherichia coli (E. coli) (47353)
  - Fecal Coliform (41290)
  - Toxicity (41496)

- **Pacheco Creek**
  - Fecal Coliform (41269)

- **Pajaro River**
  - Diazinon (41629)

- **Pajaro River Estuary**
  - Diazinon (40875)

- **Salinas River Lagoon (North)**
  - Chlorpyrifos (47956)
  - Nutrients (33922)
  - Toxicity (53533)

- **Salsipuedes Creek (Santa Cruz County)**
  - Fecal Coliform (39615)

- **San Juan Creek (San Benito County)**
  - Fecal Coliform (38172)

- **San Lorenzo River**
  - Chlorpyrifos (42647)
  - Fecal Coliform (50543)

- **San Lorenzo River Lagoon**
  - Indicator Bacteria (32748)

- **Santa Maria River**
  - Cypermethrin (51256)
  - DDD (Dichlorodiphenyldichloroethane) (53038)
  - DDE (Dichlorodiphenyldichloroethylene) (53039)
  - Diazinon (32891)
  - Malathion (52001)
  - Toxaphene (33928)

- **Santa Maria River Estuary**
  - Chlorpyrifos (48230)
  - DDD (Dichlorodiphenyldichloroethane) (53047)
  - DDE (Dichlorodiphenyldichloroethylene) (53048)
  - Diazinon (47245)
  - Escherichia coli (E. coli) (42848)
  - Fecal Coliform (42860)
  - Malathion (52003)
  - Oxygen, Dissolved (52383)
  - Toxicity (53052)

- **Soquel Lagoon**
  - Indicator Bacteria (33057)

- **Struve Slough**
  - Fecal Coliform (50492)

- **Tembladero Slough**
  - Oxygen, Dissolved (37620)

- **Tres Pinos Creek**
  - Fecal Coliform (37439)

- **Trout Creek Gulch**
  - Fecal Coliform (50136)

- **Tularcitos Creek**
  - Fecal Coliform (37561)

- **Unnamed tributary to Orcutt Creek**
  - Ammonia (53251)
  - Chlorpyrifos (48906)
  - Diazinon (47357)
  - Nitrate (53254)
  - Toxicity (53490)

- **Valencia Creek**
  - Fecal Coliform (50164)

- **Watsonville Slough**
  - Fecal Coliform (50174)

- **Zayante Creek**
  - Chlorpyrifos (42322)

List on 303(d) list (being addressed by action other than TMDL) **Regional Board 3**

- **San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)**
  - Nitrate (39556)

REGIONAL BOARD 3 - CENTRAL COAST REGION

- **New or Revised Fact Sheets**
  These lines of evidence and/or decisions, which were developed during the last listing cycle, are new or have been revised.
- **Original Fact Sheets**
  These lines of evidence and/or decisions were developed during the last listing cycle.

ORIGINAL FACT SHEETS

Delist from 303(d) list (TMDL required list) **Regional Board 3**

- **Arroyo De La Cruz**
  - Escherichia coli (E. coli) (36268)
  - Oxygen, Dissolved (36154)

- **Carpinteria Creek**
  - Pathogens (37689)

- **Glen Annie Canyon**
  - Chloride (40359)
  - Enterococcus (40400)
  - Escherichia coli (E. coli) (40424)
  - Fecal Coliform (40428)
  - Sodium (40360)

- **Los Osos Creek (Los Osos to Morro Bay)**
  - Fecal Coliform (32496)
  - Nitrate (41486)
  - Nutrients (33910)
  - Oxygen, Dissolved (42064)
  - Sedimentation/Siltation (32971)

- **Old Salinas River Estuary**
  - Ammonia (34104)
  - Oxygen, Dissolved (32847)

- **Soquel Lagoon**
  - Nitrate (33056)

- **Waddell Creek, East Branch**
  - Nutrients (32975)

Delist from 303(d) list (being addressed by USEPA approved TMDL)	Regional Board 3

- **Glen Annie Canyon**
  - Nitrate (33905)

Do Not Delist from 303(d) list (TMDL required list)	Regional Board 3

- **Chumash Creek**
  - Fecal Coliform (32776)

- **Goleta Slough/Estuary**
  - Indicator Bacteria (39657)

- **Llagas Creek (below Chesbro Reservoir)**
  - Chloride (32912)

- **Monterey Harbor**
  - Toxicity (42195)

- **San Bernardo Creek**
  - Fecal Coliform (39578)

- **Tecolotito Creek**

- Enterococcus (52722)

Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL) — Regional Board 3

- **Carbonera Creek**
  - Nutrients (32862)
- **Furlong Creek**
  - Fecal Coliform (40150)
- **Los Osos Creek (Los Osos to Los Osos Creek Estuary)**
  - Fecal Coliform (51427)
  - Sedimentation/Siltation (51425)
- **Los Osos Creek Estuary**
  - Fecal Coliform (51429)
- **Shingle Mill Creek**
  - Nitrate (37496)

Do Not List on 303(d) list (TMDL required list) — Regional Board 3

- **Alamo Creek**
  - Chlorpyrifos (41429)
  - Diazinon (46300)
- **Alisal Creek (Monterey County)**
  - Boron (36144)
  - Chloride (36153)
  - Dieldrin (41456)
  - Endrin (41600)
- **Ano Nuevo Creek**
  - Electrical Conductivity (38003)
  - Escherichia coli (E. coli) (37985)
  - Nitrate (37147)
  - Oxygen, Dissolved (37199)
  - Temperature, water (37307)
  - pH (37156)
- **Arana Gulch**
  - Ammonia (46244)
  - Chlorophyll-a (41503)
  - Diazinon (36730)
  - Nitrate (36961)
  - Oxygen, Dissolved (36946)
  - Temperature, water (46292)
  - Toxicity (42388)
  - Turbidity (36947)
  - pH (37071)
- **Arroyo Burro Creek**

- Anthracene (41462)
- Arsenic (36196)
- Benzo(a)anthracene (41518)
- Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41517)
- Cadmium (36173)
- Chromium (36220)
- Chrysene (C1-C4) (43976)
- Copper (36354)
- Dieldrin (41474)
- Endrin (41477)
- Fluoranthene (41478)
- Fluorene (41479)
- Lead (36457)
- Mercury (36506)
- Naphthalene (41508)
- Nickel (36507)
- Phenanthrene (41509)
- Pyrene (41546)
- Zinc (36174)

- **Arroyo De La Cruz**
  - Ammonia (36381)
  - Boron (36337)
  - Chloride (36338)
  - Chlorophyll-a (42298)
  - Electrical Conductivity (36386)
  - Fecal Coliform (36320)
  - Nitrate (36275)
  - Nitrogen, ammonia (Total Ammonia) (36336)
  - Sodium (36139)
  - Temperature, water (36193)
  - Turbidity (42982)
  - pH (36143)

- **Arroyo Grande Creek (below Lopez Lake)**
  - Anthracene (41501)
  - Benzo(a)anthracene (41552)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41502)
  - Chrysene (C1-C4) (41506)
  - Fluoranthene (41594)
  - Fluorene (39765)
  - Naphthalene (41434)
  - Phenanthrene (39786)
  - Pyrene (41435)

- **Arroyo Laguna**
  - Escherichia coli (E. coli) (37383)
  - Oxygen, Dissolved (37827)
  - Temperature, water (37894)
  - Total Coliform (38085)
  - pH (38096)

- **Arroyo Paredon**
  - Anthracene (41399)
  - Arsenic (37082)
  - Benzo(a)anthracene (41537)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41586)
  - Cadmium (36277)
  - Chromium (37010)

- Chrysene (C1-C4) (41549)
- Copper (36774)
- Dieldrin (41590)
- Endrin (41567)
- Fluoranthene (41400)
- Fluorene (41401)
- Lead (37025)
- Mercury (36362)
- Naphthalene (41402)
- Nickel (41442)
- Phenanthrene (41389)
- Pyrene (41390)
- Zinc (36314)

- **Arroyo Seco Creek**
  - Escherichia coli (E. coli) (37588)
  - Nitrate (36604)
  - Oxygen, Dissolved (36602)
  - Temperature, water (36663)
  - pH (36672)

- **Arroyo Seco River**
  - Toxicity (42981)

- **Arroyo del Puerto**
  - Escherichia coli (E. coli) (37157)
  - Nitrate (36684)
  - Oxygen, Dissolved (36754)
  - Temperature, water (37766)
  - pH (37812)

- **Atascadero Creek (Santa Barbara County)**
  - Anthracene (41583)
  - Benzo(a)anthracene (41595)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41584)
  - Chrysene (C1-C4) (41531)
  - Fluoranthene (41573)
  - Fluorene (41535)
  - Naphthalene (41576)
  - Phenanthrene (41577)
  - Pyrene (41589)

- **Beach Road Ditch**
  - Ammonia (37634)
  - Escherichia coli (E. coli) (37564)
  - Temperature, water (37457)

- **Bean Creek**
  - Fecal Coliform (37632)
  - Nitrate (36908)
  - Oxygen, Dissolved (36628)
  - Specific Conductivity (36799)
  - Turbidity (37219)
  - pH (36914)

- **Bear Creek(Santa Cruz County)**
  - Boron (36308)
  - Chloride (41413)

    - Chlorophyll-a (41414)
    - Escherichia coli (E. coli) (41564)
    - Fecal Coliform (41575)
    - Nitrate (41388)
    - Oxygen, Dissolved (42350)
    - Sodium (41418)
    - Specific Conductivity (41563)
    - Turbidity (41415)
    - pH (41587)

- **Bell Creek (Santa Barbara Co)**
    - Anthracene (41427)
    - Arsenic (37428)
    - Benzo(a)anthracene (41428)
    - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41420)
    - Cadmium (37296)
    - Chromium (37506)
    - Chrysene (C1-C4) (41397)
    - Copper (37517)
    - Dieldrin (41403)
    - Endrin (41459)
    - Fluoranthene (41460)
    - Fluorene (41407)
    - Lead (36790)
    - Mercury (36869)
    - Naphthalene (41408)
    - Nickel (36999)
    - Phenanthrene (41461)
    - Pyrene (41452)
    - Zinc (37485)

- **Betteravia Lakes**
    - Chlorophyll-a (41494)
    - Fecal Coliform (36691)
    - Nitrate (33696)
    - Oxygen, Dissolved (42991)
    - Temperature, water (36636)
    - Turbidity (41423)
    - pH (36862)

- **Big Oak Creek (tributary to Towne Creek)**
    - Nitrate (37178)

- **Big Sur River**
    - Enterococcus (37432)

- **Bitterwater Canyon Creek**
    - Nitrate (37244)

- **Bodfish Creek**
    - Ammonia (37245)
    - Nitrate (37336)

- **Boulder Creek**
    - Boron (37935)
    - Chlorophyll-a (42900)
    - Escherichia coli (E. coli) (38017)
    - Fecal Coliform (37130)

- Nitrate (38077)
- Oxygen, Dissolved (38090)
- Specific Conductivity (37969)
- Turbidity (42888)
- pH (38102)

- **Branciforte Creek**
  - Ammonia (37542)
  - Boron (36755)
  - Chloride (37505)
  - Chlorophyll-a (43007)
  - Diazinon (42819)
  - Nitrate (36727)
  - Oxygen, Dissolved (36777)
  - Sodium (40227)
  - Specific Conductivity (37438)
  - Toxicity (42936)
  - Turbidity (42855)
  - pH (36735)

- **Camp Evers Creek**
  - Ammonia (37986)
  - Nitrate (37881)
  - Oxygen, Dissolved (37893)
  - Temperature, water (37308)
  - Turbidity (37359)

- **Canada De La Gaviota**
  - Anthracene (41961)
  - Arsenic (37916)
  - Benzo(a)anthracene (42014)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41962)
  - Cadmium (38024)
  - Chromium (37377)
  - Chrysene (C1-C4) (41959)
  - Copper (38117)
  - Dieldrin (41969)
  - Endrin (41966)
  - Fluoranthene (41967)
  - Fluorene (41968)
  - Lead (38118)
  - Mercury (37882)
  - Naphthalene (44286)
  - Nickel (37944)
  - Phenanthrene (42332)
  - Pyrene (42333)
  - Zinc (37481)

- **Canada Del Capitan**
  - Chlorpyrifos (41954)
  - Diazinon (41955)

- **Canada Del Refugio**
  - Chlorpyrifos (41846)
  - Diazinon (41847)

- **Carbonera Creek**
  - Ammonia (37534)

- Electrical Conductivity (37338)
- Oxygen, Dissolved (37324)
- Turbidity (37501)
- pH (37544)

- **Carmel River**
  - Anthracene (41838)
  - Benzo(a)anthracene (42630)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41891)
  - Chrysene (C1-C4) (41855)
  - Enterococcus (37779)
  - Fluoranthene (41870)
  - Fluorene (41910)
  - Naphthalene (41922)
  - Phenanthrene (41960)
  - Pyrene (42631)

- **Carnadero Creek (Uvas Creek below Bloomfield Road)**
  - Chlorpyrifos (42010)
  - Diazinon (41854)

- **Carneros Creek (Monterey County)**
  - Toxicity (42886)

- **Carneros Creek (Santa Barbara County)**
  - Chlorpyrifos (42435)
  - Diazinon (42725)
  - Toxicity (42958)

- **Carpinteria Creek**
  - Anthracene (41948)
  - Arsenic (38360)
  - Benzo(a)anthracene (41950)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41949)
  - Cadmium (38303)
  - Chromium (41911)
  - Chrysene (C1-C4) (42002)
  - Copper (38347)
  - Dieldrin (42006)
  - Endrin (42007)
  - Fluoranthene (41849)
  - Fluorene (41850)
  - Lead (37653)
  - Mercury (38333)
  - Naphthalene (41999)
  - Nickel (38322)
  - Phenanthrene (41830)
  - Pyrene (41831)
  - Zinc (38214)

- **Carpinteria Creek (below Gobernador Creek)**
  - Anthracene (50333)
  - Arsenic (50252)
  - Benzo(a)anthracene (50290)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (50279)
  - Cadmium (50244)
  - Chromium (50235)
  - Chrysene (C1-C4) (50414)

- Copper (50398)
- Dieldrin (50394)
- Endrin (50316)
- Fluoranthene (50298)
- Fluorene (50285)
- Lead (50211)
- Mercury (50408)
- Naphthalene (50265)
- Nickel (50388)
- Phenanthrene (50310)
- Pyrene (50303)
- Zinc (50346)

- **Casserly Creek**
  - Oxygen, Dissolved (37696)
  - Temperature, water (37695)
  - Turbidity (37658)
  - pH (37840)

- **Cassery Creek**
  - Ammonia (38240)
  - Nitrate (38241)

- **Chalone Creek**
  - Nitrate (38334)

- **Chorro Creek**
  - Anthracene (41988)
  - Arsenic (38907)
  - Benzo(a)anthracene (41940)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41939)
  - Cadmium (38602)
  - Chromium (38594)
  - Chrysene (C1-C4) (41992)
  - Copper (38762)
  - Dieldrin (41942)
  - Endrin (41943)
  - Fluoranthene (42581)
  - Fluorene (42531)
  - Lead (38887)
  - Mercury (38977)
  - Naphthalene (42542)
  - Nickel (39050)
  - Phenanthrene (42584)
  - Pyrene (41906)
  - Zinc (38390)

- **Chualar Creek, South Branch**
  - Escherichia coli (E. coli) (38683)
  - Fecal Coliform (38749)

- **Cieneguitas Creek**
  - Nitrate (38933)
  - Turbidity (38554)
  - pH (38613)

- **Corcoran Lagoon**
  - Escherichia coli (E. coli) (38698)

- Oxygen, Dissolved (38407)
- Turbidity (38425)

- **Corralitos Creek**
  - Ammonia (38739)
  - Boron (38265)
  - Chloride (39047)
  - Chlorophyll-a (38863)
  - Nitrate (39455)
  - Oxygen, Dissolved (32636)
  - Sodium (38812)
  - Specific Conductivity (38950)
  - Temperature, water (38421)

- **Cuyama River (above Twitchell Reservoir)**
  - Chlorpyrifos (41924)
  - Diazinon (41935)
  - Toxicity (41829)

- **Cuyama River (below Twitchell Reservoir)**
  - Chlorpyrifos (41916)
  - Diazinon (41917)
  - Toxicity (41920)

- **Dani Creek**
  - Escherichia coli (E. coli) (38793)
  - Nitrate (39004)
  - Oxygen, Dissolved (38478)
  - Temperature, water (38495)
  - pH (38498)

- **Davenport Creek**
  - Chlorophyll-a (39508)
  - Oxygen, Dissolved (39509)
  - Temperature, water (38939)
  - Turbidity (38940)
  - pH (38991)

- **Devereux Creek**
  - Anthracene (40818)
  - Arsenic (38941)
  - Benzo(a)anthracene (40556)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (40618)
  - Cadmium (38915)
  - Chlorpyrifos (40674)
  - Chromium (38643)
  - Chrysene (C1-C4) (40651)
  - Copper (38816)
  - Diazinon (40716)
  - Dieldrin (40920)
  - Endrin (40608)
  - Fluoranthene (40669)
  - Fluorene (40670)
  - Lead (38711)
  - Mercury (39011)
  - Naphthalene (40623)
  - Nickel (39012)
  - Phenanthrene (40468)

    - Pyrene (40627)
    - Zinc (38645)

- **Dolphin Brook**
    - Escherichia coli (E. coli) (39525)
    - Nitrate (39318)
    - Oxygen, Dissolved (39373)
    - Temperature, water (39304)
    - pH (39350)

- **Dos Pueblos Canyon Creek**
    - Chlorpyrifos (42025)
    - Diazinon (41857)
    - Toxicity (42026)

- **Doud Creek**
    - Escherichia coli (E. coli) (39152)
    - Nitrate (39884)
    - Oxygen, Dissolved (39422)
    - Temperature, water (39495)
    - pH (39858)

- **Dufour Creek**
    - Nitrate (39400)
    - Oxygen, Dissolved (39310)
    - Temperature, water (39142)
    - pH (39273)

- **Elkhorn Slough**
    - Enterococcus (38831)

- **Estrella River**
    - Escherichia coli (E. coli) (39745)

- **Ferrari Creek**
    - Escherichia coli (E. coli) (39588)
    - Nitrate (39589)
    - Oxygen, Dissolved (39894)
    - Temperature, water (39895)
    - pH (39934)

- **Franklin Creek (Santa Barbara County)**
    - Anthracene (39835)
    - Arsenic (39547)
    - Benzo(a)anthracene (39791)
    - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (39803)
    - Cadmium (39794)
    - Chromium (39751)
    - Chrysene (C1-C4) (39968)
    - Copper (39989)
    - Fluoranthene (40433)
    - Fluorene (40434)
    - Lead (39736)
    - Mercury (39753)
    - Naphthalene (39686)
    - Nickel (39703)
    - Phenanthrene (39704)

Pyrene (40448)
- Zinc (40443)

- **Furlong Creek**
  - Chlorophyll-a (39379)
  - Diazinon (39716)
  - Oxygen, Dissolved (40148)
  - Temperature, water (40169)
  - Toxicity (42492)
  - pH (39758)

- **Gabilan Creek**
  - Dieldrin (40127)
  - Endrin (40334)

- **Gallighan Slough**
  - Total Coliform (40592)
  - Turbidity (40800)
  - pH (40693)

- **Gazos Creek**
  - Anthracene (40233)
  - Arsenic (40354)
  - Benzo(a)anthracene (40058)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (40110)
  - Cadmium (40120)
  - Chlorpyrifos (40234)
  - Chromium (40132)
  - Chrysene (C1-C4) (40089)
  - Copper (40092)
  - Diazinon (40099)
  - Dieldrin (40106)
  - Endrin (40107)
  - Fluoranthene (35860)
  - Fluorene (40105)
  - Lead (40028)
  - Mercury (39672)
  - Naphthalene (39739)
  - Nickel (39674)
  - Phenanthrene (40174)
  - Pyrene (39728)
  - Toxicity (42608)
  - Zinc (40167)

- **Glen Annie Canyon**
  - Anthracene (40447)
  - Arsenic (40285)
  - Benzo(a)anthracene (40158)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (40190)
  - Boron (40387)
  - Cadmium (40462)
  - Chlorophyll-a (40388)
  - Chlorpyrifos (40414)
  - Chromium (40159)
  - Chrysene (C1-C4) (40160)
  - Copper (40225)
  - Diazinon (40399)
  - Dieldrin (39571)
  - Electrical Conductivity (40349)

- Endrin (40458)
- Fluoranthene (40194)
- Fluorene (40207)
- Lead (40426)
- Mercury (40435)
- Naphthalene (40257)
- Nickel (40265)
- Oxygen, Dissolved (40396)
- Phenanthrene (40266)
- Pyrene (40382)
- Temperature, water (40361)
- Turbidity (40407)
- Zinc (40385)
- pH (40459)

- **Gold Gulch Creek**
  - Fecal Coliform (39384)
  - Nitrate (39341)
  - Oxygen, Dissolved (39285)
  - Temperature, water (39385)
  - Turbidity (39357)
  - pH (39597)

- **Goleta Slough/Estuary**
  - Ammonia (39541)
  - Chlorophyll-a (40404)
  - Fecal Coliform (40389)
  - Oxygen, Dissolved (40390)
  - Turbidity (40391)
  - pH (40406)

- **Granite Creek**
  - Ammonia (40824)
  - Escherichia coli (E. coli) (40668)
  - Nitrate (40667)
  - Oxygen, Dissolved (40666)
  - Temperature, water (40696)
  - pH (40467)

- **Graves Creek**
  - Escherichia coli (E. coli) (40827)
  - Fecal Coliform (40896)
  - Nitrate (40911)
  - Oxygen, Dissolved (42449)
  - Temperature, water (40840)
  - pH (40785)

- **Hanson Slough**
  - Turbidity (40811)
  - pH (40854)

- **Harkins Slough**
  - Ammonia (40510)
  - Chlorpyrifos (40702)
  - Diazinon (40703)
  - Toxicity (42636)
  - Turbidity (40579)
  - pH (40578)

- **Hot Springs Creek (Monterey County)**
  - Escherichia coli (E. coli) (40529)
  - Nitrate (40501)
  - Oxygen, Dissolved (40484)
  - Temperature, water (40485)
  - pH (40528)

- **Intel Creek**
  - Nitrate (40686)
  - Oxygen, Dissolved (40718)
  - Temperature, water (40550)
  - Turbidity (40475)
  - pH (40570)

- **Jalama Creek**
  - Anthracene (40613)
  - Arsenic (40673)
  - Benzo(a)anthracene (40567)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (40566)
  - Cadmium (40922)
  - Chromium (40537)
  - Chrysene (C1-C4) (40551)
  - Copper (40552)
  - Dieldrin (40495)
  - Endrin (40575)
  - Fluoranthene (40637)
  - Fluorene (40612)
  - Lead (41755)
  - Mercury (41377)
  - Naphthalene (41168)
  - Nickel (41782)
  - Phenanthrene (41601)
  - Pyrene (41602)
  - Zinc (41615)

- **Kings Creek**
  - Escherichia coli (E. coli) (41198)
  - Fecal Coliform (41724)
  - Nitrate (41640)
  - Temperature, water (41694)
  - Turbidity (41800)
  - pH (41211)

- **Laguna Creek (Santa Cruz County)**
  - Ammonia (41314)
  - Enterococcus (41327)
  - Escherichia coli (E. coli) (41200)
  - Nitrate (41707)
  - Oxygen, Dissolved (41709)
  - Specific Conductivity (41270)
  - Temperature, water (41777)
  - pH (41710)

- **Liddell Creek**
  - Escherichia coli (E. coli) (41653)
  - Nitrate (41347)
  - Oxygen, Dissolved (41335)
  - Specific Conductivity (39477)

    - Temperature, water (41376)
    - Turbidity (41175)
    - pH (41176)

- **Little Cholame Creek**
    - Nitrate (41146)
    - Specific Conductivity (41100)

- **Little Creek**
    - Escherichia coli (E. coli) (41050)
    - Nitrate (41042)
    - Oxygen, Dissolved (41092)
    - Specific Conductivity (41093)
    - Temperature, water (41032)
    - pH (41049)

- **Little Pico Creek**
    - Escherichia coli (E. coli) (40977)
    - Nitrate (41062)
    - Oxygen, Dissolved (42116)
    - Specific Conductivity (42245)
    - Temperature, water (42246)
    - pH (42044)

- **Llagas Creek (above Chesbro Reservoir)**
    - Ammonia (40995)
    - Chlorophyll-a (40998)
    - Fecal Coliform (40991)
    - Nitrate (40997)
    - Oxygen, Dissolved (40990)
    - Specific Conductivity (41029)
    - Turbidity (42248)

- **Llagas Creek (below Chesbro Reservoir)**
    - Boron (42212)
    - Diazinon (41444)

- **Lockhart Gulch**
    - Nitrate (41997)
    - Temperature, water (42072)
    - Turbidity (42074)

- **Lompico Creek**
    - Turbidity (41532)

- **Los Berros Creek**
    - Boron (41497)
    - Fecal Coliform (42137)

- **Los Osos Creek (Los Osos to Morro Bay)**
    - Electrical Conductivity (42066)
    - Escherichia coli (E. coli) (42065)
    - Temperature, water (42078)
    - Turbidity (42070)
    - pH (42081)

- **Los Osos Creek Estuary**

    - Escherichia coli (E. coli) (51412)
    - Specific Conductivity (51391)

- **Love Creek**
    - Nitrate (42127)
    - Oxygen, Dissolved (42190)
    - Temperature, water (42128)
    - Turbidity (41566)
    - pH (41519)

- **Majors Creek (Monterey County)**
    - Nitrate (42999)
    - Oxygen, Dissolved (42772)
    - Temperature, water (42657)
    - pH (42735)

- **Majors Creek (Santa Cruz County)**
    - Escherichia coli (E. coli) (43088)
    - Nitrate (43423)
    - Oxygen, Dissolved (43435)
    - Temperature, water (43473)
    - pH (43474)

- **Malpaso Creek**
    - Escherichia coli (E. coli) (41574)
    - Nitrate (41409)
    - Oxygen, Dissolved (41410)
    - Temperature, water (41411)
    - pH (42194)

- **Manson Creek**
    - Ammonia (41232)
    - Nitrate (41543)
    - Oxygen, Dissolved (41542)
    - Temperature, water (41593)
    - Turbidity (41487)
    - pH (41453)

- **Maria Ygnacio Creek**
    - Chlorpyrifos (41393)
    - Diazinon (41394)
    - Toxicity (41592)

- **McEnery Spring**
    - Nitrate (42238)
    - Oxygen, Dissolved (42189)
    - Temperature, water (42200)

- **McGowan Ditch**
    - Ammonia (42185)

- **McWay Creek**
    - Escherichia coli (E. coli) (42129)
    - Nitrate (42130)
    - Oxygen, Dissolved (42182)
    - Temperature, water (42183)
    - pH (42184)

- **Millers Canal**
  - Diazinon (42202)

- **Molino Creek**
  - Escherichia coli (E. coli) (41901)
  - Nitrate (42146)
  - Oxygen, Dissolved (42158)
  - Specific Conductivity (42198)
  - Temperature, water (42159)
  - pH (42149)

- **Montecito Creek**
  - Chlorpyrifos (41488)
  - Diazinon (42094)
  - Toxicity (41386)

- **Monterey Bay South (Coastline)**
  - Chromium (33349)

- **Monterey Harbor**
  - Anthracene (41112)
  - Benzo(a)anthracene (42141)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41099)
  - Chlorophyll-a (41107)
  - Chromium (41888)
  - Chrysene (C1-C4) (42110)
  - Fluoranthene (42173)
  - Fluorene (41015)
  - Lead (41023)
  - Naphthalene (41068)
  - Nickel (41069)
  - Phenanthrene (41038)
  - Pyrene (41082)

- **Moore Creek**
  - Ammonia (42237)
  - Enterococcus (40993)
  - Nitrate (41030)
  - Temperature, water (41096)
  - Turbidity (40978)

- **Morro Bay**
  - Aluminum (32892)
  - Barium (32393)
  - Chromium (33474)
  - Copper (32809)
  - Lead (34040)
  - Nickel (32632)
  - Vanadium (fume or dust) (32601)
  - Zinc (32649)

- **Moss Landing Harbor**
  - Anthracene (42131)
  - Benzo(a)anthracene (42240)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (42135)
  - Chromium (42151)
  - Chrysene (C1-C4) (42089)

- Copper (42140)
- Fluoranthene (42107)
- Fluorene (42102)
- Lead (42155)
- Naphthalene (40943)
- Phenanthrene (41111)
- Pyrene (42176)
- Zinc (42177)

- **Natividad Creek**
  - Dieldrin (41078)
  - Endrin (41025)

- **Nearys Lake**
  - Escherichia coli (E. coli) (41079)
  - Nitrate (41135)
  - Oxygen, Dissolved (41136)
  - Temperature, water (41067)
  - Turbidity (41080)
  - pH (42099)

- **Newell Creek (Lower)**
  - Nitrate (41179)
  - Oxygen, Dissolved (41161)
  - Specific Conductivity (41177)
  - Turbidity (41044)

- **Nipomo Creek**
  - Chlorpyrifos (41643)
  - Diazinon (41644)

- **Nobel Gulch Creek**
  - Ammonia (41181)
  - Fecal Coliform (41331)
  - Nitrate (41192)
  - Oxygen, Dissolved (41332)
  - Temperature, water (41280)
  - Turbidity (41810)
  - pH (41637)

- **North Main Street Channel**
  - Ammonia (41340)
  - Fecal Coliform (41341)

- **Old Salinas River**
  - Anthracene (41201)
  - Arsenic (41263)
  - Benzo(a)anthracene (41277)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (40533)
  - Cadmium (41013)
  - Chromium (41058)
  - Chrysene (C1-C4) (41656)
  - Copper (41658)
  - Dieldrin (41728)
  - Endrin (41729)
  - Fluoranthene (41674)
  - Fluorene (41676)
  - Lead (41683)

- Mercury (41688)
- Naphthalene (41689)
- Nickel (41348)
- Phenanthrene (41359)
- Pyrene (41361)
- Zinc (41337)

- **Old Womans Creek**
  - Ammonia (41020)
  - Escherichia coli (E. coli) (41073)
  - Nitrate (41072)
  - Oxygen, Dissolved (41074)
  - Temperature, water (41654)
  - pH (41655)

- **Orcutt Creek**
  - Aluminum (33289)
  - Dacthal (32517)
  - Iron (33494)
  - Manganese (32753)

- **Pacheco Creek**
  - Ammonia (41742)
  - Boron (41614)
  - Chloride (41625)
  - Chlorophyll-a (41626)
  - Chlorpyrifos (41750)
  - Diazinon (41162)
  - Escherichia coli (E. coli) (41229)
  - Nitrate (41230)
  - Sodium (41796)
  - Specific Conductivity (41228)
  - Temperature, water (41244)
  - Toxicity (41609)
  - pH (41752)

- **Pacific Ocean (Point Pinos to Point Sur)**
  - Dieldrin (43137)

- **Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)**
  - Enterococcus (36992)
  - Fecal Coliform (36912)
  - Total Coliform (36651)

- **Pacific Ocean at Avila Beach (Avila Pier)**
  - Chlorpyrifos (36223)
  - Diazinon (36283)
  - Dieldrin (36284)
  - Endosulfan (36285)
  - Endrin (36411)
  - Heptachlor epoxide (37111)
  - Hexachlorobenzene/ HCB (36881)
  - Mirex (36882)
  - Toxaphene (36181)

- **Pacific Ocean at Capitola Beach (Santa Cruz County)**
  - Escherichia coli (E. coli) (41524)

- **Pacific Ocean at Carmel Beach at Ocean Avenue**
  - Escherichia coli (E. coli) (36931)
- **Pacific Ocean at Cayucos (Cayucos Creek Mouth)**
  - Fecal Coliform (36674)
  - Total Coliform (36913)
- **Pacific Ocean at Corcoran Lagoon Beach**
  - Escherichia coli (E. coli) (37098)
- **Pacific Ocean at Cowell Beach (Santa Cruz County)**
  - Escherichia coli (E. coli) (37623)
- **Pacific Ocean at Hearst State Beach (North of Pier)**
  - Enterococcus (36736)
  - Fecal Coliform (36820)
  - Total Coliform (36821)
- **Pacific Ocean at Hearst State Beach (South of Pier)**
  - Enterococcus (37100)
  - Fecal Coliform (36749)
  - Total Coliform (36750)
- **Pacific Ocean at Julia Pfeiffer Burns Beach**
  - Enterococcus (37401)
  - Fecal Coliform (37447)
  - Total Coliform (37446)
- **Pacific Ocean at Lighthouse Beach (Santa Cruz County)**
  - Escherichia coli (E. coli) (37465)
- **Pacific Ocean at Lovers Point (Monterey County)**
  - Escherichia coli (E. coli) (36640)
- **Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk**
  - Escherichia coli (E. coli) (37038)
- **Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth**
  - Escherichia coli (E. coli) (36811)
- **Pacific Ocean at Manresa Beach**
  - Escherichia coli (E. coli) (37597)
- **Pacific Ocean at Mitchells Cove Beach**
  - Escherichia coli (E. coli) (37408)
- **Pacific Ocean at Monterey State Beach (Del Monte Beach)**
  - Escherichia coli (E. coli) (36860)
- **Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)**
  - Escherichia coli (E. coli) (36715)
- **Pacific Ocean at Moran Lake, County Beach**
  - Escherichia coli (E. coli) (37756)

- **Pacific Ocean at Natural Bridges Beach**
  - Escherichia coli (E. coli) (37509)
- **Pacific Ocean at Neary Lagoon mouth**
  - Fecal Coliform (37914)
- **Pacific Ocean at New Brighton Beach (Santa Cruz County)**
  - Escherichia coli (E. coli) (37939)
- **Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)**
  - Escherichia coli (E. coli) (37960)
- **Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier**
  - Enterococcus (44484)
  - Total Coliform (41973)
- **Pacific Ocean at Pleasure Point Beach**
  - Escherichia coli (E. coli) (37246)
- **Pacific Ocean at Port San Luis Beach (oil pier)**
  - Chlorpyrifos (41859)
  - Diazinon (42499)
  - Dieldrin (41860)
  - Endosulfan (41861)
  - Endrin (41912)
  - Heptachlor epoxide (41863)
  - Hexachlorobenzene/ HCB (41864)
  - Mirex (41865)
  - Toxaphene (41866)
- **Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth**
  - Escherichia coli (E. coli) (42500)
- **Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach**
  - Escherichia coli (E. coli) (37900)
- **Pacific Ocean at San Carlos Beach (Monterey County)**
  - Escherichia coli (E. coli) (38439)
- **Pacific Ocean at San Vicente Beach (Davenport)**
  - Escherichia coli (E. coli) (37704)
- **Pacific Ocean at Scott Creek Beach**
  - Escherichia coli (E. coli) (38571)
- **Pacific Ocean at Seabright (Castle) Beach**
  - Escherichia coli (E. coli) (38139)
- **Pacific Ocean at Seacliff State Beach**
  - Escherichia coli (E. coli) (38292)
- **Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive**
  - Enterococcus (37849)
  - Fecal Coliform (37851)
  - Total Coliform (37699)

- **Pacific Ocean at Spanish Bay Beach**
  - Escherichia coli (E. coli) (38301)

- **Pacific Ocean at Stillwater Cove Beach**
  - Escherichia coli (E. coli) (42447)

- **Pacific Ocean at Sunny Cove Beach**
  - Escherichia coli (E. coli) (38996)

- **Pacific Ocean at Sunset Beach**
  - Escherichia coli (E. coli) (39051)

- **Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)**
  - Escherichia coli (E. coli) (39082)

- **Pacific Ocean at Toro Beach**
  - Chlorpyrifos (41978)
  - Diazinon (41979)
  - Dieldrin (42564)
  - Endosulfan (42603)
  - Endrin (42604)
  - Heptachlor epoxide (42614)
  - Hexachlorobenzene/ HCB (42606)
  - Mirex (42607)
  - PCBs (Polychlorinated biphenyls) (42432)
  - Toxaphene (42617)

- **Pacific Ocean at Twin Lakes Beach (Santa Cruz County)**
  - Escherichia coli (E. coli) (39083)

- **Pacific Ocean at Waddell Creek Beach**
  - Escherichia coli (E. coli) (38964)

- **Pajaro River**
  - Enterococcus (41702)
  - Heptachlor (40601)
  - Heptachlor epoxide (40614)
  - Methoxychlor (41691)
  - Toxaphene (41757)

- **Palo Colorado Canyon Creek**
  - Electrical Conductivity (41036)
  - Escherichia coli (E. coli) (41243)
  - Nitrate (41367)
  - Oxygen, Dissolved (41196)
  - Temperature, water (41375)
  - pH (41667)

- **Pancho Rico Creek**
  - Nitrate (41057)

- **Partington Creek**
  - Escherichia coli (E. coli) (41159)
  - Nitrate (41373)
  - Oxygen, Dissolved (41164)

- Temperature, water (41165)
- pH (41351)

- **Paso Robles Creek**
  - Electrical Conductivity (40946)
  - Escherichia coli (E. coli) (40996)
  - Fecal Coliform (40959)
  - Nitrate (40999)
  - Oxygen, Dissolved (41010)
  - Temperature, water (40949)
  - Turbidity (41024)
  - pH (40973)

- **Pescadero Creek (San Benito County)**
  - Ammonia (41813)
  - Fecal Coliform (41366)
  - Nitrate (41368)
  - Oxygen, Dissolved (41802)
  - Specific Conductivity (41621)
  - Temperature, water (41369)
  - Turbidity (41370)
  - pH (41382)

- **Pinto Lake**
  - Chloride (40831)
  - Electrical Conductivity (40890)
  - Turbidity (40531)

- **Pismo Creek**
  - Anthracene (40858)
  - Arsenic (40846)
  - Benzo(a)anthracene (40760)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (40774)
  - Cadmium (40813)
  - Chlorpyrifos (40220)
  - Chromium (40812)
  - Chrysene (C1-C4) (40798)
  - Copper (40797)
  - Diazinon (40221)
  - Dieldrin (40754)
  - Endrin (40903)
  - Fluoranthene (40902)
  - Fluorene (40931)
  - Lead (40930)
  - Mercury (40929)
  - Naphthalene (40915)
  - Nickel (40857)
  - Phenanthrene (40941)
  - Pyrene (40021)
  - Specific Conductivity (40872)
  - Zinc (40243)

- **Plaskett Creek**
  - Escherichia coli (E. coli) (40855)
  - Nitrate (40868)
  - Oxygen, Dissolved (40867)
  - Temperature, water (40866)
  - pH (40787)

- **Port San Luis**
  - Anthracene (40536)
  - Benzo(a)anthracene (40491)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (40481)
  - Chlorophyll-a (40584)
  - Chromium (40682)
  - Chrysene (C1-C4) (40680)
  - Copper (40685)
  - Fluoranthene (40573)
  - Fluorene (40653)
  - Lead (40574)
  - Naphthalene (40560)
  - Nickel (40511)
  - Phenanthrene (40561)
  - Pyrene (40885)
  - Toxicity (40624)
  - Zinc (40626)

- **Porter Gulch Creek**
  - Ammonia (40652)
  - Nitrate (40519)
  - Oxygen, Dissolved (40520)
  - Temperature, water (40571)
  - Turbidity (40477)
  - pH (40521)

- **Prewitt Creek**
  - Escherichia coli (E. coli) (40747)
  - Nitrate (40923)
  - Oxygen, Dissolved (40238)
  - Temperature, water (41352)
  - pH (40924)

- **Rincon Creek**
  - Anthracene (40513)
  - Arsenic (40479)
  - Benzo(a)anthracene (40863)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (40819)
  - Cadmium (40820)
  - Chromium (40821)
  - Chrysene (C1-C4) (40833)
  - Copper (40662)
  - Dieldrin (40851)
  - Endrin (40852)
  - Fluoranthene (40808)
  - Fluorene (40659)
  - Lead (40504)
  - Mercury (40505)
  - Naphthalene (40616)
  - Nickel (40589)
  - Phenanthrene (40590)
  - Pyrene (41295)
  - Zinc (40689)

- **Rinconada Creek**
  - Escherichia coli (E. coli) (40743)
  - Fecal Coliform (40917)
  - Nitrate (40707)

Oxygen, Dissolved (40758)
    - Temperature, water (40777)
    - pH (40791)

- **Robs Creek**
    - Escherichia coli (E. coli) (40714)
    - Nitrate (40842)
    - Oxygen, Dissolved (40843)
    - Temperature, water (40526)
    - pH (40482)

- **Rocky Creek**
    - Escherichia coli (E. coli) (40938)
    - Nitrate (40721)
    - Oxygen, Dissolved (40727)
    - Temperature, water (40769)
    - pH (40713)

- **Rodeo Creek Gulch**
    - Ammonia (40633)
    - Nitrate (40763)
    - Oxygen, Dissolved (40764)
    - Temperature, water (40775)

- **Romero Creek**
    - Chlorpyrifos (40604)
    - Diazinon (40665)
    - Toxicity (40675)

- **Salinas Reclamation Canal**
    - Dieldrin (41562)
    - Endrin (40847)
    - Zinc (40524)

- **Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)**
    - Carbofuran (39832)

- **Salinas River Refuge Lagoon (South)**
    - Chlorophyll-a (39946)
    - Chlorpyrifos (39947)
    - Diazinon (40004)
    - Oxygen, Dissolved (39995)
    - Temperature, water (39952)

- **Salisbury Creek**
    - Ammonia (39723)
    - Chlorophyll-a (39734)
    - Nitrate (39825)
    - Oxygen, Dissolved (40018)
    - Temperature, water (39993)

- **Salsipuedes Creek (Santa Cruz County)**
    - Boron (39893)
    - Chloride (39821)
    - Chlorpyrifos (39908)
    - Diazinon (39953)
    - Sodium (39985)

- **San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)**
  - Anthracene (39929)
  - Benzo(a)anthracene (39887)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (39843)
  - Chrysene (C1-C4) (39804)
  - Fluoranthene (39797)
  - Fluorene (39798)
  - Naphthalene (39627)
  - Phenanthrene (39827)
  - Pyrene (39873)

- **San Benito River**
  - Chlorpyrifos (40005)
  - Diazinon (39681)
  - Nitrate (39951)

- **San Felipe Lake**
  - Ammonia (39243)
  - Nitrate (39275)

- **San Jose Creek (Monterey County)**
  - Benthic Community Effects (52519)

- **San Jose Creek (Santa Barbara County)**
  - Chlorpyrifos (41578)
  - Diazinon (41579)

- **San Juan Creek (San Benito County)**
  - Chlorpyrifos (41580)
  - Diazinon (41417)

- **San Lorenzo Creek (Monterey County)**
  - Toxicity (37691)

- **San Lorenzo River**
  - Anthracene (42502)
  - Arsenic (37816)
  - Benzo(a)anthracene (42512)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (42503)
  - Cadmium (37817)
  - Chromium (38236)
  - Chrysene (C1-C4) (42506)
  - Copper (38319)
  - DDT (Dichlorodiphenyltrichloroethane) (43401)
  - Diazinon (42453)
  - Dieldrin (42515)
  - Endrin (41883)
  - Fluoranthene (41923)
  - Fluorene (41873)
  - Lead (38304)
  - Mercury (38316)
  - Naphthalene (41874)
  - Nickel (38197)
  - Phenanthrene (41925)
  - Pyrene (41878)
  - Toxicity (39698)
  - Zinc (38296)

- **San Luis Obispo Creek (below Osos Street)**
  - Anthracene (42609)
  - Benzo(a)anthracene (42620)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (42610)
  - Chrysene (C1-C4) (42443)
  - Fluoranthene (41840)
  - Fluorene (41913)
  - Naphthalene (41880)
  - Phenanthrene (41842)
  - Pyrene (41884)

- **San Martin Creek**
  - Ammonia (38057)
  - Nitrate (37899)
  - pH (37898)

- **San Miguelito Creek**
  - Chlorpyrifos (41897)
  - Diazinon (41929)

- **San Pedro Creek (Santa Barbara County)**
  - Chlorpyrifos (42495)
  - Diazinon (42496)

- **San Simeon Creek**
  - Anthracene (42442)
  - Arsenic (38310)
  - Benzo(a)anthracene (42601)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (42482)
  - Cadmium (38258)
  - Chromium (38272)
  - Chrysene (C1-C4) (42611)
  - Copper (37870)
  - Dieldrin (42615)
  - Endrin (42616)
  - Fluoranthene (42626)
  - Fluorene (42618)
  - Lead (38574)
  - Mercury (38238)
  - Naphthalene (42619)
  - Nickel (38239)
  - Phenanthrene (42629)
  - Pyrene (42621)
  - Zinc (38314)

- **San Vicente Creek (Santa Cruz County)**
  - Escherichia coli (E. coli) (38291)
  - Nitrate (38202)
  - Oxygen, Dissolved (38156)
  - Specific Conductivity (38182)
  - Temperature, water (38157)
  - pH (38217)

- **San Ysidro Creek**
  - Chlorpyrifos (42507)
  - Diazinon (42508)
  - Toxicity (37811)

- **Santa Barbara Harbor**
  - Anthracene (41938)
  - Benzo(a)anthracene (41893)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41892)
  - Chromium (42478)
  - Chrysene (C1-C4) (41941)
  - Fluoranthene (42632)
  - Fluorene (42530)
  - Lead (42487)
  - Naphthalene (41898)
  - Nickel (42513)
  - Phenanthrene (41899)
  - Pyrene (42623)
  - Toxicity (42319)

- **Santa Cruz Harbor**
  - Anthracene (42362)
  - Benzo(a)anthracene (41953)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41952)
  - Chromium (41956)
  - Chrysene (C1-C4) (42008)
  - Fluoranthene (42516)
  - Fluorene (42517)
  - Lead (42529)
  - Naphthalene (44168)
  - Nickel (42518)
  - Phenanthrene (42519)
  - Pyrene (42536)
  - Toxicity (42373)

- **Santa Margarita Creek**
  - Escherichia coli (E. coli) (38223)
  - Fecal Coliform (38224)
  - Nitrate (38563)
  - Oxygen, Dissolved (38564)
  - Temperature, water (38565)
  - pH (38583)

- **Santa Maria River**
  - Aluminum (32714)
  - Dacthal (32723)
  - Hexachlorobenzene/ HCB (37263)
  - Iron (32902)
  - Manganese (32598)

- **Santa Rita Creek (Monterey County)**
  - Copper (37197)
  - Toxicity (38730)
  - Zinc (38016)

- **Santa Rosa Creek (San Luis Obispo County)**
  - Anthracene (42460)
  - Arsenic (37472)
  - Benzo(a)anthracene (42464)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (42463)
  - Cadmium (37479)
  - Chromium (37241)
  - Chrysene (C1-C4) (42476)

- Copper (38122)
- Dieldrin (42467)
- Endrin (42468)
- Fluoranthene (42479)
- Fluorene (42457)
- Lead (37824)
- Mercury (37188)
- Naphthalene (42458)
- Nickel (37190)
- Phenanthrene (42470)
- Pyrene (42474)
- Zinc (37921)

- **Santa Ynez River (Cachuma Lake to below city of Lompoc)**
  - Anthracene (42403)
  - Arsenic (37196)
  - Benzo(a)anthracene (42418)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (42374)
  - Cadmium (37907)
  - Chlorpyrifos (42528)
  - Chromium (38095)
  - Chrysene (C1-C4) (42419)
  - Copper (37880)
  - Diazinon (42539)
  - Dieldrin (42533)
  - Endrin (42534)
  - Fluoranthene (42575)
  - Fluorene (42485)
  - Lead (37366)
  - Mercury (37304)
  - Naphthalene (42555)
  - Nickel (37305)
  - Phenanthrene (42567)
  - Pyrene (42558)
  - Zinc (37354)

- **Santa Ynez River (above Lake Cachuma)**
  - Chlorpyrifos (42317)
  - Diazinon (42318)

- **Santa Ynez River (below city of Lompoc to Ocean)**
  - Anthracene (42587)
  - Arsenic (37355)
  - Benzo(a)anthracene (42625)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (42588)
  - Cadmium (38005)
  - Chromium (38006)
  - Chrysene (C1-C4) (42551)
  - Copper (37993)
  - Dieldrin (42552)
  - Endrin (42554)
  - Fluoranthene (41944)
  - Fluorene (41984)
  - Lead (38086)
  - Mercury (38076)
  - Naphthalene (44232)
  - Nickel (37346)
  - Phenanthrene (41990)
  - Pyrene (41991)

Zinc (37778)

- **Schwan Lake**
  - Oxygen, Dissolved (38035)
  - Turbidity (38073)
  - pH (38074)

- **Scott Creek**
  - Ammonia (Unionized) (38638)
  - Anthracene (42538)
  - Arsenic (38081)
  - Benzo(a)anthracene (42591)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (42550)
  - Cadmium (37912)
  - Chlorophyll-a (39345)
  - Chlorpyrifos (42560)
  - Chromium (38116)
  - Chrysene (C1-C4) (42541)
  - Copper (37943)
  - Diazinon (42559)
  - Dieldrin (42553)
  - Electrical Conductivity (37200)
  - Endrin (42594)
  - Enterococcus (37915)
  - Fluoranthene (42599)
  - Fluorene (42600)
  - Lead (37649)
  - Mercury (37164)
  - Naphthalene (42637)
  - Nickel (37835)
  - Nitrate (37260)
  - Nitrogen, ammonia (Total Ammonia) (37474)
  - Oxygen, Dissolved (44266)
  - Phenanthrene (42570)
  - Pyrene (42547)
  - Temperature, water (37901)
  - Toxicity (42522)
  - Turbidity (39520)
  - Zinc (38231)
  - pH (37902)

- **Scott Creek Lagoon**
  - Anthracene (50855)
  - Arsenic (50865)
  - Benzo(a)anthracene (50830)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (50928)
  - Cadmium (50864)
  - Chlorpyrifos (50925)
  - Chromium (50847)
  - Chrysene (C1-C4) (50833)
  - Copper (50879)
  - Diazinon (50862)
  - Dieldrin (50904)
  - Endrin (50929)
  - Fluoranthene (50903)
  - Fluorene (50902)
  - Lead (50829)
  - Mercury (50842)
  - Naphthalene (50926)

Nickel (50892)
- Phenanthrene (50896)
- Pyrene (50816)
- Toxicity (50927)
- Zinc (50853)

- **Shingle Mill Creek**
  - Oxygen, Dissolved (37357)
  - Temperature, water (37411)
  - Turbidity (37533)
  - pH (37546)

- **Soberanes Creek**
  - Escherichia coli (E. coli) (37374)
  - Nitrate (37262)
  - Oxygen, Dissolved (37327)
  - Temperature, water (37965)
  - pH (37966)

- **Struve Slough**
  - Total Coliform (37055)

- **Sycamore Canyon Creek (Monterey County)**
  - Escherichia coli (E. coli) (36712)
  - Nitrate (37092)
  - Oxygen, Dissolved (37046)
  - Temperature, water (37047)
  - pH (37048)

- **Sycamore Creek**
  - Anthracene (41993)
  - Arsenic (36665)
  - Benzo(a)anthracene (41836)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (41994)
  - Cadmium (36666)
  - Chromium (36681)
  - Chrysene (C1-C4) (42543)
  - Copper (36682)
  - Dieldrin (42544)
  - Endrin (42556)
  - Fluoranthene (42545)
  - Fluorene (42546)
  - Lead (36623)
  - Mercury (36624)
  - Naphthalene (42582)
  - Nickel (37487)
  - Phenanthrene (42589)
  - Pyrene (42592)
  - Zinc (36838)

- **Tecolote Creek (Santa Barbara County)**
  - Chlorpyrifos (42565)
  - Diazinon (42566)
  - Toxicity (39331)

- **Tecolotito Creek**
  - Anthracene (52539)
  - Benzo(a)anthracene (52544)

- Benzo(a)pyrene (3,4-Benzopyrene -7-d) (52731)
- Cadmium (52688)
- Chlorpyrifos (52547)
- Chromium (52632)
- Chrysene (C1-C4) (52607)
- Copper (52602)
- Diazinon (52745)
- Dieldrin (52586)
- Endrin (52546)
- Fluoranthene (52655)
- Fluorene (52643)
- Lead (52597)
- Mercury (52595)
- Naphthalene (52583)
- Nickel (52574)
- Phenanthrene (52589)
- Pyrene (52579)
- Zinc (52550)

- **Tembladero Slough**
  - Anthracene (42576)
  - Benzo(a)anthracene (42569)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (42568)
  - Chrysene (C1-C4) (42580)
  - Fluoranthene (42572)
  - Fluorene (42583)
  - Naphthalene (42948)
  - Phenanthrene (42595)
  - Pyrene (42605)

- **Topo Creek**
  - Ammonia (36724)
  - Chlorophyll-a (39101)
  - Fecal Coliform (37770)
  - Nitrate (37402)

- **Toro Canyon Creek**
  - Chlorpyrifos (42574)
  - Diazinon (42613)
  - Toxicity (38646)

- **Towne Creek**
  - Nitrate (37265)

- **Tres Pinos Creek**
  - Ammonia (36673)
  - Boron (37117)
  - Chloride (36979)
  - Chlorophyll-a (38827)
  - Nitrate (36626)
  - Oxygen, Dissolved (36818)
  - Sodium (36904)
  - Specific Conductivity (36861)
  - Turbidity (38633)

- **Trout Creek (San Luis Obispo County)**
  - Escherichia coli (E. coli) (37998)
  - Fecal Coliform (37126)

    - Nitrate (38107)
    - Oxygen, Dissolved (37230)
    - Temperature, water (37247)
    - pH (37315)

- **Trout Creek Gulch**
    - Ammonia (37932)
    - Escherichia coli (E. coli) (38125)
    - Nitrate (38110)
    - Oxygen, Dissolved (38111)
    - Temperature, water (38018)
    - pH (37937)

- **Two Bar Creek**
    - Nitrate (38000)
    - Oxygen, Dissolved (39454)
    - Temperature, water (37335)
    - Turbidity (37890)
    - pH (38079)

- **Uvas Creek (above Uvas Reservoir)**
    - Ammonia (37138)
    - Nitrate (37139)
    - Oxygen, Dissolved (37430)
    - Turbidity (39245)

- **Uvas Creek (below Uvas Reservoir)**
    - Ammonia (37628)
    - Boron (36985)
    - Chloride (36773)
    - Chlorophyll-a (38671)
    - Chlorpyrifos (42642)
    - Diazinon (42643)
    - Escherichia coli (E. coli) (37214)
    - Fecal Coliform (36612)
    - Nitrate (37215)
    - Sodium (36603)
    - Specific Conductivity (37526)
    - Temperature, water (36805)
    - Toxicity (39255)
    - pH (37102)

- **Valencia Creek**
    - Chlorophyll-a (38664)
    - Turbidity (39290)

- **Vicente Creek**
    - Escherichia coli (E. coli) (37316)
    - Nitrate (37165)
    - Oxygen, Dissolved (37166)
    - Temperature, water (37952)
    - pH (37953)

- **Waddell Creek**
    - Ammonia (Unionized) (37413)
    - Anthracene (37574)
    - Arsenic (37575)
    - Benzo(a)anthracene (37225)

- Benzo(a)pyrene (3,4-Benzopyrene -7-d) (37224)
- Boron (37442)
- Cadmium (37443)
- Chloride (37603)
- Chlorophyll-a (38912)
- Chlorpyrifos (42585)
- Chromium (36866)
- Chrysene (C1-C4) (36748)
- Copper (36670)
- Diazinon (42586)
- Dieldrin (42596)
- Electrical Conductivity (36671)
- Endrin (42633)
- Enterococcus (37607)
- Fluoranthene (42000)
- Fluorene (42001)
- Lead (37456)
- Mercury (37398)
- Naphthalene (42011)
- Nickel (37593)
- Nitrate (37582)
- Nitrogen, ammonia (Total Ammonia) (37105)
- Oxygen, Dissolved (37424)
- Phenanthrene (42003)
- Pyrene (42004)
- Sodium (37610)
- Temperature, water (37611)
- Toxicity (38932)
- Turbidity (38978)
- Zinc (37605)
- pH (37350)

- **Waddell Creek Lagoon**
  - Anthracene (51014)
  - Arsenic (51094)
  - Benzo(a)anthracene (51006)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (51007)
  - Cadmium (51008)
  - Chlorpyrifos (51016)
  - Chromium (51093)
  - Chrysene (C1-C4) (51092)
  - Copper (51090)
  - Diazinon (51037)
  - Dieldrin (51088)
  - Endrin (51086)
  - Enterococcus (51070)
  - Fluoranthene (51066)
  - Fluorene (51065)
  - Lead (51064)
  - Mercury (51063)
  - Naphthalene (51062)
  - Nickel (51061)
  - Phenanthrene (51040)
  - Pyrene (51039)
  - Toxicity (51082)
  - Zinc (51038)

- **Watsonville Creek**
  - Toxicity (37726)

- **Watsonville Slough**
  - Sedimentation/Siltation (33952)

- **Wild Cattle Creek**
  - Escherichia coli (E. coli) (38034)
  - Nitrate (38130)
  - Oxygen, Dissolved (38051)
  - Temperature, water (38052)
  - pH (38053)

- **Wilder Creek**
  - Escherichia coli (E. coli) (37529)
  - Nitrate (37555)
  - Oxygen, Dissolved (38062)
  - Temperature, water (38063)
  - pH (37984)

- **Willow Creek (Monterey County)**
  - Anthracene (36886)
  - Arsenic (36217)
  - Benzo(a)anthracene (36269)
  - Benzo(a)pyrene (3,4-Benzopyrene -7-d) (36218)
  - Cadmium (36140)
  - Chlorpyrifos (42628)
  - Chromium (36445)
  - Chrysene (C1-C4) (36219)
  - Copper (37074)
  - Diazinon (42638)
  - Dieldrin (42273)
  - Endrin (42274)
  - Fluoranthene (36396)
  - Fluorene (36436)
  - Lead (36322)
  - Mercury (36488)
  - Naphthalene (36489)
  - Nickel (37013)
  - Phenanthrene (36228)
  - Pyrene (36229)
  - Toxicity (38962)
  - Zinc (36166)

- **Woodrow Creek**
  - Escherichia coli (E. coli) (37213)
  - Nitrate (37216)
  - Oxygen, Dissolved (37396)
  - Temperature, water (37535)
  - Turbidity (37536)
  - pH (37537)

- **Yerba Buena Creek**
  - Escherichia coli (E. coli) (38058)
  - Nitrate (37999)
  - Oxygen, Dissolved (37834)
  - Temperature, water (37211)
  - pH (37212)

- **Zayante Creek**
  - Ammonia (36775)

- Boron (36974)
- Chlorophyll-a (38283)
- Diazinon (42489)
- Escherichia coli (E. coli) (37011)
- Nitrate (36892)
- Oxygen, Dissolved (36290)
- Toxicity (37724)
- Turbidity (38284)
- pH (36250)

List on 303(d) list (TMDL required list)	Regional Board 3

- **Alisal Creek (Monterey County)**
  - Sodium (36187)

- **Arana Gulch**
  - Escherichia coli (E. coli) (36960)
  - Fecal Coliform (46293)

- **Atascadero Creek (Santa Barbara County)**
  - Enterococcus (36635)

- **Beach Road Ditch**
  - Nitrate (37580)
  - Oxygen, Dissolved (37407)
  - Turbidity (37468)
  - pH (37592)

- **Camp Evers Creek**
  - pH (37146)

- **Carneros Creek (Santa Barbara County)**
  - Enterococcus (38433)
  - Specific Conductivity (43560)

- **Carpinteria Marsh (El Estero)**
  - Nutrients (34000)
  - Oxygen, Dissolved (34059)
  - Priority Organics (33821)

- **Casmalia Canyon Creek**
  - Sedimentation/Siltation (44324)

- **Cieneguitas Creek**
  - Enterococcus (39030)
  - Escherichia coli (E. coli) (39019)
  - Oxygen, Dissolved (38968)
  - Temperature, water (38475)

- **Corcoran Lagoon**
  - Total Coliform (38614)
  - pH (38859)

- **Corralitos Creek**

    - Turbidity (43142)
    - pH (38803)

- **Elkhorn Slough**
    - Pesticides (33901)
    - Sedimentation/Siltation (33969)

- **Espinosa Slough**
    - Pesticides (44457)
    - Priority Organics (33970)

- **Estrella River**
    - Chloride (39110)
    - Fecal Coliform (39632)
    - Sodium (39281)

- **Furlong Creek**
    - Escherichia coli (E. coli) (40104)
    - Nitrate (40162)
    - Turbidity (40164)

- **Glen Annie Canyon Creek**
    - Enterococcus (52723)
    - Escherichia coli (E. coli) (52717)

- **Goleta Slough/Estuary**
    - Priority Organics (34036)

- **Harkins Slough**
    - Chlorophyll-a (40701)
    - Oxygen, Dissolved (40650)

- **Las Tablas Creek**
    - Metals (42775)

- **Las Tablas Creek, North Fork**
    - Metals (34054)

- **Las Tablas Creek, South Fork**
    - Metals (34055)

- **Llagas Creek (above Chesbro Reservoir)**
    - Temperature, water (41014)
    - pH (42062)

- **Llagas Creek (below Chesbro Reservoir)**
    - Escherichia coli (E. coli) (42316)
    - Sodium (34759)

- **Lockhart Gulch**
    - Oxygen, Dissolved (41505)
    - pH (44790)

- **Los Berros Creek**
    - Chloride (41536)

    - Sodium (42075)

- Love Creek
    - Sedimentation/Siltation (34514)

- Majors Creek (Monterey County)
    - Copper (42843)
    - Escherichia coli (E. coli) (42895)
    - Lead (42433)
    - Zinc (42726)

- Maria Ygnacio Creek
    - Enterococcus (41568)

- McEnery Spring
    - pH (42239)

- McGowan Ditch
    - Nitrate (42143)

- Millers Canal
    - Escherichia coli (E. coli) (44823)

- Moore Creek
    - Escherichia coli (E. coli) (42119)
    - Oxygen, Dissolved (42114)
    - Specific Conductivity (41132)
    - pH (41061)

- Moro Cojo Slough
    - Pesticides (44588)
    - Sedimentation/Siltation (36380)

- Moss Landing Harbor
    - Indicator Bacteria (34526)
    - Nickel (41599)
    - Sedimentation/Siltation (34528)
    - Toxicity (41598)

- Mountain Charlie Gulch
    - Sedimentation/Siltation (34529)

- Newell Creek (Lower)
    - pH (41106)

- Newell Creek (Upper)
    - Sedimentation/Siltation (44596)

- Old Salinas River Estuary
    - Nutrients (34530)
    - Pesticides (34569)

- Pacheco Creek
    - Oxygen, Dissolved (41239)
    - Turbidity (44693)

- **Pacific Ocean (Point Ano Nuevo to Soquel Point)**
  - Dieldrin (43101)
- **Pacific Ocean at Avila Beach (Avila Pier)**
  - PCBs (Polychlorinated biphenyls) (41529)
- **Pacific Ocean at Cayucos (Cayucos Creek Mouth)**
  - Enterococcus (37405)
- **Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier**
  - Fecal Coliform (44876)
- **Pennington Creek**
  - Fecal Coliform (32872)
- **Pinto Lake**
  - Chlorophyll-a (40889)
  - Cyanobacteria hepatotoxic microcystins (42408)
  - Scum/Foam-unnatural (42265)
  - pH (40544)
- **Porter Gulch Creek**
  - Enterococcus (40676)
  - Escherichia coli (E. coli) (40518)
- **Rodeo Creek Gulch**
  - Turbidity (40789)
  - pH (40834)
- **Salinas Reclamation Canal**
  - Copper (40801)
  - Priority Organics (34757)
- **Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)**
  - Enterococcus (40256)
  - Toxaphene (34734)
- **Salinas River Refuge Lagoon (South)**
  - Turbidity (39996)
  - pH (40008)
- **San Benito River**
  - Boron (39889)
  - Escherichia coli (E. coli) (39945)
- **San Jose Creek (Santa Barbara County)**
  - Enterococcus (39963)
- **San Juan Creek (San Benito County)**
  - Escherichia coli (E. coli) (38384)
- **San Lorenzo River**
  - Chlordane (43179)
  - Enterococcus (50544)

Escherichia coli (E. coli) (50542)
    - PCBs (Polychlorinated biphenyls) (43455)

- San Luisito Creek
    - Fecal Coliform (32849)

- San Pedro Creek (Santa Barbara County)
    - Enterococcus (37682)

- Santa Ynez River (Cachuma Lake to below city of Lompoc)
    - Sedimentation/Siltation (32767)
    - Total Dissolved Solids (38345)

- Santa Ynez River (below city of Lompoc to Ocean)
    - Sedimentation/Siltation (32827)
    - Total Dissolved Solids (37746)

- Schwan Lake
    - Escherichia coli (E. coli) (37739)
    - Fecal Coliform (37740)
    - Nutrients (37547)
    - Total Coliform (38050)

- Shuman Canyon Creek
    - Sedimentation/Siltation (32532)

- Soda Lake
    - Ammonia (34028)

- Soquel Creek
    - Enterococcus (36622)

- Soquel Lagoon
    - Sedimentation/Siltation (33058)

- Struve Slough
    - Escherichia coli (E. coli) (50491)

- Tembladero Slough
    - Enterococcus (37629)

- Tres Pinos Creek
    - Escherichia coli (E. coli) (37631)
    - pH (37094)

- Uvas Creek (above Uvas Reservoir)
    - Temperature, water (37738)
    - pH (37204)

- Uvas Creek (below Uvas Reservoir)
    - Oxygen, Dissolved (44855)
    - Turbidity (38672)

- Valencia Creek
    - Escherichia coli (E. coli) (50159)

- Sedimentation/Siltation (32539)

- **Walters Creek**
  - Fecal Coliform (34447)

- **Zayante Creek**
  - Fecal Coliform (36900)

List on 303(d) list (being addressed by USEPA approved TMDL)	Regional Board 3

- **Chorro Creek**
  - Sedimentation/Siltation (32775)

- **Dairy Creek**
  - Fecal Coliform (32648)

- **Espinosa Lake**
  - Diazinon (41963)

- **Gallighan Slough**
  - Indicator Bacteria (42627)

- **Hanson Slough**
  - Indicator Bacteria (42537)

- **Lompico Creek**
  - Sedimentation/Siltation (34710)

- **Morro Bay**
  - Indicator Bacteria (32506)
  - Sedimentation/Siltation (32497)

- **Pajaro River**
  - Sedimentation/Siltation (34152)

- **Rider Creek**
  - Sedimentation/Siltation (34323)

- **San Benito River**
  - Sedimentation/Siltation (33748)

- **Santa Maria River Estuary**
  - Total Coliform (37228)

Region 3
Central Coast Regional Water Quality Control Board

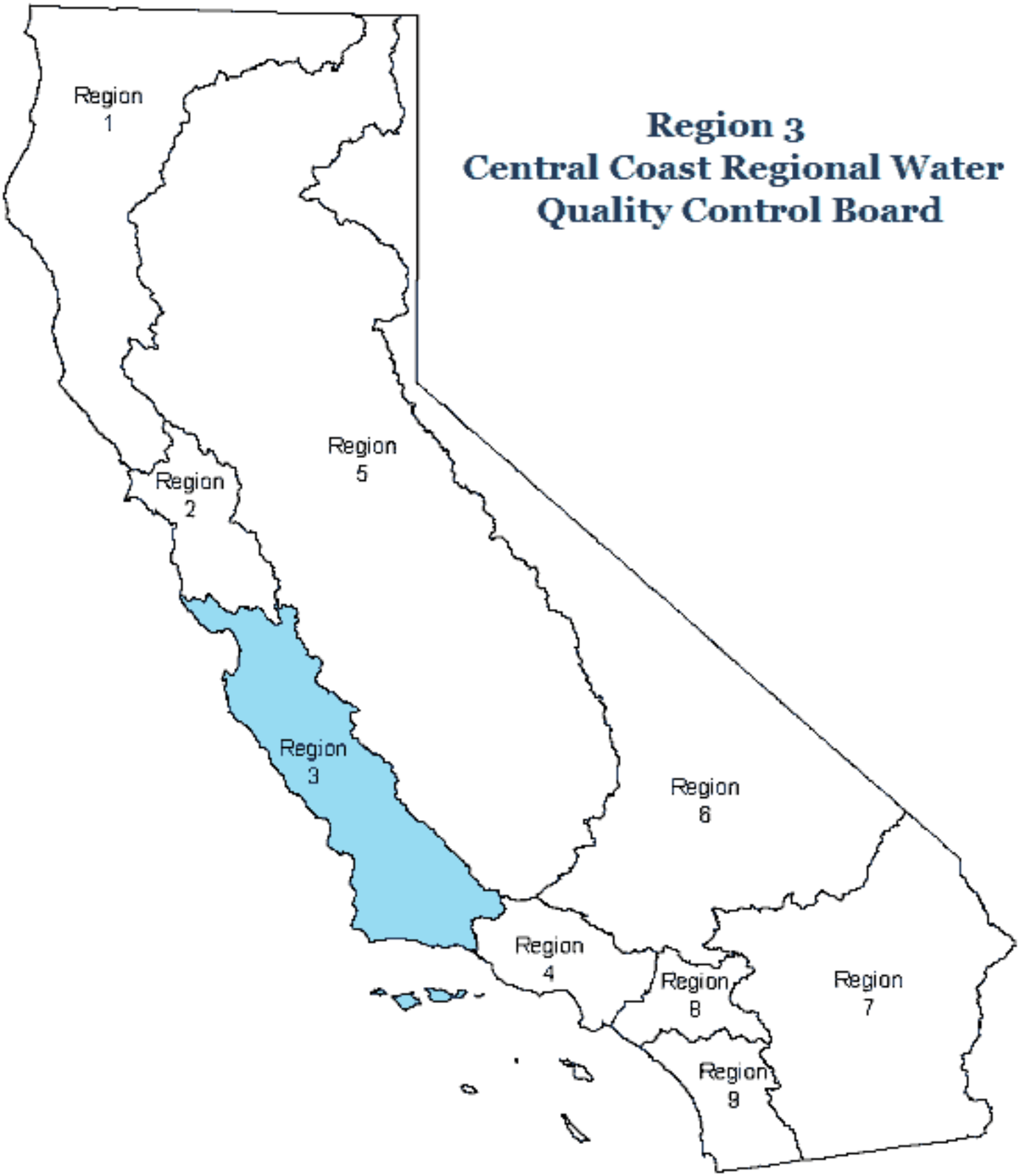

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Glen Annie Canyon Creek**
Water Body ID: **CAR3153100020150122048203**
Water Body Type: **River & Stream**

DECISION ID	52676	Region 3
Glen Annie Canyon Creek		

Pollutant: **Toxicity**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough.

Twelve lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Four LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and two additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in sediment samples. Zero of the three sediment samples resulted in a significant toxic effect to one or more test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Eight LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fifteen total samples are available to assess toxic effects in water samples. Nine of the fifteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Nine of the 15 water samples exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81033
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81081
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The samples included survival and growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Glen Annie Canyon Creek
Spatial Representation:	The samples were collected at 315GAN.
Temporal Representation:	The samples were collected from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81084
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The samples included survival and growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Glen Annie Canyon Creek
Spatial Representation:	The samples were collected at 315GAN.
Temporal Representation:	The samples were collected from 2007 to 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81085
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81086
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81016
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81019
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [

	315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81021
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Five of the eleven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia (9/23/08, 1/23/08, 3/25/08) and growth of Selenastrum capricornutum (9/23/08, 9/16/09, 10/23/07, 3/25/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Glen Annie Canyon Creek
Spatial Representation:	The samples were collected at 315GAN - Glenn Annie Creek and 315GBR - Glenn Annie Creek @ Bishop Ranch Rd.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81023
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Five of the eleven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia (9/23/08, 1/23/08, 3/25/08) and growth of Selenastrum capricornutum (9/23/08, 9/16/09, 10/23/07, 3/25/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Glen Annie Canyon Creek
Spatial Representation:	The samples were collected at 315GAN - Glenn Annie Creek and 315GBR - Glenn Annie Creek @ Bishop Ranch Rd.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81025
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81030
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52676, Toxicity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81031
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52689**	**Region 3**
Glen Annie Canyon Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Glen Annie/Los Carneros Creek Nitrate TMDL
TMDL Project Code:	1057
Date TMDL Approved by USEPA:	07/31/2014
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough. LOEs 14773 and 14774 which previously included data from stations on both Glen Annie Canyon Creek (station GA2) and the newly mapped Tecolotito Creek (GA1) have been revised to change the sample counts. Zero of the 72 nitrate samples and zero of the 51 nitrate/nitrite samples exceed the water quality objectives for Agricultural Supply. This use is fully supported. However, 42 of the 72 nitrate samples and 40 of the 63 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. This use is not supported. Furthermore, the most recent data (collected between 2007 and 2010) were also compared to the evaluation guideline for aquatic life protection and 40 of the 51 nitrate samples and 40 of the 51

nitrate/nitrite samples exceed the evaluation guidelines for Cold and Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat:
1) Dissolved oxygen for this water body ranged from 5.78 mg/L to 14.83 mg/L, at times exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and rising above the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Percent cover of floating algal mats observed in the creek ranged from 0% to 75% cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration peaked at 24 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 1.04 mg/L to 4.07 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 24 g/m2 ash-free dry weight (AFDW) to 98 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 60 mg/m2 to 246 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-two of the 72 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use and 40 of the 63 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Forty of the 51 nitrate samples also exceed the water quality objectives for aquatic life uses and there is supporting evidence of bio-stimulation and eutrophication in this water segment.
4. The Glen Annie Canyon, Tecolotito Creek, and Carneros Creek Nitrate TMDL has been approved by USEPA on July 31, 2014.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81057
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 8 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81061
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81064
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were

	identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81067
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81037
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 40 of 51 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81039
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	51
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 28 of 51 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81041
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81055
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 69 of 105 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81046
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 40 of 51 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81048
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek

	to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52689, Nitrate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81053
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52609**	**Region 3**
Glen Annie Canyon Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 49 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 66 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52609, Ammonia **Region 3**

Glen Annie Canyon Creek

LOE ID:	80961
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52609, Ammonia **Region 3**

Glen Annie Canyon Creek

LOE ID:	80965
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52609, Ammonia **Region 3**

Glen Annie Canyon Creek

LOE ID:	80966
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section

	II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 4/9/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52609, Ammonia **Region 3**

Glen Annie Canyon Creek

LOE ID:	80960
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52609, Ammonia **Region 3**

Glen Annie Canyon Creek

LOE ID:	80962
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 4/9/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52609, Ammonia **Region 3**

Glen Annie Canyon Creek

LOE ID:	80963
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52634**	**Region 3**
Glen Annie Canyon Creek		

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009) for aquatic life uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52634, Azinphos-methyl (Guthion) **Region 3**

Glen Annie Canyon Creek

LOE ID:	80991
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52634, Azinphos-methyl (Guthion) **Region 3**

Glen Annie Canyon Creek

LOE ID:	80988
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	52557	Region 3
Glen Annie Canyon Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 60 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 60 samples exceed the evaluation guideline and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52557, Chlorophyll-a **Region 3**

Glen Annie Canyon Creek

LOE ID:	80914
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52557, Chlorophyll-a **Region 3**

Glen Annie Canyon Creek

LOE ID:	80911
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52557, Chlorophyll-a **Region 3**

Glen Annie Canyon Creek

LOE ID:	80910
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52557, Chlorophyll-a **Region 3**

Glen Annie Canyon Creek

LOE ID:	80913

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52548**	**Region 3**
Glen Annie Canyon Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those

data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of two water samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52548, Chlorpyrifos **Region 3**

Glen Annie Canyon Creek

LOE ID:	80905
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52548, Chlorpyrifos **Region 3**

Glen Annie Canyon Creek

LOE ID:	80902
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52548, Chlorpyrifos **Region 3**

Glen Annie Canyon Creek

LOE ID:	80897
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **52625** **Region 3**

Glen Annie Canyon Creek

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009) for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52625, Demeton **Region 3**

Glen Annie Canyon Creek

LOE ID:	80982
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52625, Demeton **Region 3**

Glen Annie Canyon Creek

LOE ID:	80980
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency, Office of Water, Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **52746** **Region 3**

Glen Annie Canyon Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52746, Diazinon **Region 3**

Glen Annie Canyon Creek

LOE ID:	81078
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]

Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52746, Diazinon **Region 3**

Glen Annie Canyon Creek

LOE ID:	81101
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52746, Diazinon **Region 3**

Glen Annie Canyon Creek

LOE ID:	81103
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52679**	**Region 3**
Glen Annie Canyon Creek		

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (maximum acceptable toxicant concentration (USEPA Office of Pesticide Programs, 2011) for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52679, Dichlorvos **Region 3**

Glen Annie Canyon Creek

LOE ID:	81036
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52679, Dichlorvos **Region 3**

Glen Annie Canyon Creek

LOE ID:	81035
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **52669** **Region 3**

Glen Annie Canyon Creek

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines (maximum acceptable toxicant concentration (USEPA Office of Pesticide Programs, 2011) for aquatic life uses and California Department of Health Services notification level for drinking water. Zero of two samples exceed the evaluation guideline (California Department of Health Services notification level) for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52669, Dimethoate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81022
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52669, Dimethoate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81024
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52669, Dimethoate **Region 3**

Glen Annie Canyon Creek

LOE ID:	81026
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	52661	Region 3
Glen Annie Canyon Creek		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (USEPA drinking water health level) for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52661, Disulfoton **Region 3**

Glen Annie Canyon Creek

LOE ID:	81018
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **52713** **Region 3**

Glen Annie Canyon Creek

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined in USEPA, 1985). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52713, Ethoprop **Region 3**

Glen Annie Canyon Creek

LOE ID:	81070
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.

Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52713, Ethoprop **Region 3**

Glen Annie Canyon Creek

LOE ID:	81069
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 52624 Region 3

Glen Annie Canyon Creek

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52624, Malathion — Region 3

Glen Annie Canyon Creek

LOE ID:	80978
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52624, Malathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80979
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52624, Malathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80981

Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52593**	**Region 3**
Glen Annie Canyon Creek		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines for aquatic life uses (USEPA Office of Pesticide Programs, 2011) and drinking water uses (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52593, Methidathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80949
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52593, Methidathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80948
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52593, Methidathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80950
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52590**	**Region 3**
Glen Annie Canyon Creek		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines for aquatic life uses (CDFW, 1992) and drinking water uses (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52590, Methyl Parathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80945
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52590, Methyl Parathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80944
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52590, Methyl Parathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80947
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System

Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **52654** **Region 3**

Glen Annie Canyon Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough. Twelve lines of evidence are available in the administrative record to assess this pollutant. Seven of the 109 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and zero of the 109 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Fifty-five of the 116 samples are below 85% saturation, but the median of the data does not exceed (fall below) the Objective. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Seven of the 109 samples exceeded the Cold Freshwater Habitat water quality objective and zero of the 163 samples exceeded the Warm Freshwater Habitat water quality objective. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	81013
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	81011
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek

	to determine beneficial use support and results are as follows: 25 of 48 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	81010
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 26 of 56 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks]

Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	80983
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	81005

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 25 of 48 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	81002
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	81004
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 26 of 56 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	80996
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	80995
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 48 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	80994
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 5 of 49 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	80987
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52654, Oxygen, Dissolved **Region 3**

Glen Annie Canyon Creek

LOE ID:	80985
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID **52552** **Region 3**

Glen Annie Canyon Creek

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline for aquatic life uses (US National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of

the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52552, Parathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80908
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52552, Parathion **Region 3**

Glen Annie Canyon Creek

LOE ID:	80909
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **52584** **Region 3**

Glen Annie Canyon Creek

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52584, Phorate **Region 3**

Glen Annie Canyon Creek

LOE ID:	80938
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]

Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52584, Phorate **Region 3**

Glen Annie Canyon Creek

LOE ID:	80941
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52584, Phorate **Region 3**

Glen Annie Canyon Creek

LOE ID:	80935
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52560**	**Region 3**
Glen Annie Canyon Creek		

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52560, Phosmet **Region 3**

Glen Annie Canyon Creek

LOE ID:	80919
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52560, Phosmet **Region 3**

Glen Annie Canyon Creek

LOE ID:	80918
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52560, Phosmet **Region 3**

Glen Annie Canyon Creek

LOE ID:	80917
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Glen Annie Canyon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Glen Annie Canyon was collected at 1 monitoring site [Glenn Annie Creek - 315GAN]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	52611	Region 3
Glen Annie Canyon Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with the water segment named 'Glen Annie Canyon' but in the 2014 assessment cycle was transferred to the newly mapped Â''Glen Annie Canyon Creek' , where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 96 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 96 samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52611, Specific Conductivity	Region 3
Glen Annie Canyon Creek	

LOE ID:	80968
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52611, Specific Conductivity **Region 3**

Glen Annie Canyon Creek

LOE ID:	81181
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **52617** **Region 3**

Glen Annie Canyon Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough. Three lines of evidence are available in the administrative record to assess this pollutant. One of the 112 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 112 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52617, Temperature, water **Region 3**

Glen Annie Canyon Creek

LOE ID:	80974
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 49 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52617, Temperature, water **Region 3**

Glen Annie Canyon Creek

LOE ID:	80972
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52617, Temperature, water **Region 3**

Glen Annie Canyon Creek

LOE ID:	80971
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	52559	Region 3
Glen Annie Canyon Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough. Six lines of evidence are available in the administrative record to assess this pollutant. Nine of the 110 samples exceed the evaluation guideline for cold freshwater habitat (Sigler et al. 1984) and seven of the 110 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 110 samples exceed the evaluation guideline for cold freshwater habitat and seven of the 110 samples exceed the warm freshwater habitat evaluation guideline. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52559, Turbidity	Region 3
Glen Annie Canyon Creek	

LOE ID:	80920
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52559, Turbidity **Region 3**

Glen Annie Canyon Creek

LOE ID:	80922
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 47 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1monitoring site [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52559, Turbidity **Region 3**

Glen Annie Canyon Creek

LOE ID:	80926
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 47 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52559, Turbidity **Region 3**

Glen Annie Canyon Creek

LOE ID:	80928
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 52559, Turbidity **Region 3**

Glen Annie Canyon Creek

LOE ID:	80930
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 6 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52559, Turbidity **Region 3**

Glen Annie Canyon Creek

LOE ID:	80916
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 5 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52743**	**Region 3**
Glen Annie Canyon Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 60 samples exceed the water quality objectives for Agricultural Supply, Warm and Cold Freshwater Habitats, Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 60 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81056
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	80890
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81040
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support

	and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	80893
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81054
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81068
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81099
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81100
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81093
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81094
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81062
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52743, pH **Region 3**

Glen Annie Canyon Creek

LOE ID:	81038
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **52723** **Region 3**

Glen Annie Canyon Creek

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough. The LOEs have been revised to reflect the changes in sample and exceedance counts, the changes are described below. Two lines of evidence are available in the administrative record to assess this pollutant. Station GA2 is located in the newly mapped Glen Annie Canyon Creek but station GA1 is located in the newly mapped Tecolotito Creek segment downstream. When evaluating data for the station GA2 only, 39 of the 45 samples exceed the single sample maximum for protection of Water Contact Recreation (i.e. swimming) and two of the 45 samples exceed the single sample maximum for protection of Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-nine of the 45 samples exceed the single sample maximum for protection of Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52723, Enterococcus **Region 3**

Glen Annie Canyon Creek

LOE ID:	81076
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	39
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 39 of 45 samples Collection at Station GA1 exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52723, Enterococcus **Region 3**

Glen Annie Canyon Creek

LOE ID:	81080
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	45
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 45 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.

QAPP Information Reference(s): e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID	52717	Region 3
Glen Annie Canyon Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. No new data are assessed. This decision has not changed from the 2010 listing cycle. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek which is mapped from Highway101 to the Goleta Slough. The LOEs have been revised to reflect the changes in sample and exceedance counts, and the changes are described below. Two lines of evidence are available in the administrative record to assess this pollutant. Station GA2 is located in the newly mapped Glen Annie Canyon Creek station GA1is located in the newly mapped Tecolotito Creek segment downstream. When evaluating data for the station GA2 only, 36 of 46 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and one of 46 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-six of 46 samples exceed the evaluation guideline for water contact recreation uses and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52717, Escherichia coli (E. coli)	**Region 3**
Glen Annie Canyon Creek	

LOE ID:	81072
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	59
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 59 of 100 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52717, Escherichia coli (E. coli) **Region 3**

Glen Annie Canyon Creek

LOE ID:	81074
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	100
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 100 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period

	exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Tecolotito Creek**
Water Body ID: **CAR3153100020150122047582**
Water Body Type: **River & Stream**

DECISION ID	52677	Region 3
Tecolotito Creek		

Pollutant: **Toxicity**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Other
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: No new data are assessed.

The decision to delist is due to the mapping change, and the removal of data for upstream stations from this decision. All exceedances of the water quality objective occurred at the upstream station now mapped to Glen Annie Canyon Creek.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough.

Four lines of evidence are available in the administrative record to assess this pollutant. One sample is defined as being collected on the same day at the same location. Samples collected prior to 2007 are summarized in LOEs with the test organism name as the pollutant (i.e. invertebrate toxicity). Zero of the two samples exceed the water quality objective for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency in table 4.1 of the Listing Policy.
4. The decision to delist is due to the mapping change, and the removal of data for upstream stations from this decision. All exceedances of the water quality objective occurred at the upstream station now mapped to Glen Annie Canyon Creek.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the impaired reach is upstream, in the water segment named Glen Annie Canyon Creek.

Line of Evidence (LOE) for Decision ID 52677, Toxicity **Region 3**

Tecolotito Creek

LOE ID:	81034
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52677, Toxicity **Region 3**

Tecolotito Creek

LOE ID:	81032
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52677, Toxicity **Region 3**

Tecolotito Creek

LOE ID:	81020
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52677, Toxicity **Region 3**

Tecolotito Creek

LOE ID:	81017
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint

	when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52651**	**Region 3**
Tecolotito Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This decision was previously for the water segment named Glen Annie Canyon but has been copied to Tecolotito Creek (which is mapped from Highway101 to the Goleta Slough). These LOEs and the decision language is now associated with this new decision for Tecolotito Creek.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 27 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-two of the 27 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 52651, Chloride **Region 3**

Tecolotito Creek

LOE ID:	81008
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52651, Chloride **Region 3**

Tecolotito Creek

LOE ID:	80870
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52716** **Region 3**

Tecolotito Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. Three lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 66 samples exceed the USEPA criterion. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-four of the 66 samples exceed the USEPA criterion and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 52716, Escherichia coli (E. coli) **Region 3**

Tecolotito Creek

LOE ID:	81071
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	23
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 23 of 54 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers

	Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52716, Escherichia coli (E. coli) **Region 3**

Tecolotito Creek

LOE ID:	81073
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 54 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52716, Escherichia coli (E. coli) **Region 3**

Tecolotito Creek

LOE ID:	80858
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52672** **Region 3**

Tecolotito Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Nine of 26 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 1 of 26 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 26 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 52672, Fecal Coliform **Region 3**

Tecolotito Creek

LOE ID:	81029
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52672, Fecal Coliform — Region 3

Tecolotito Creek

LOE ID:	80859
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52672, Fecal Coliform — Region 3

Tecolotito Creek

LOE ID:	80871
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52672, Fecal Coliform **Region 3**

Tecolotito Creek

LOE ID:	81027
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period

	exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52570 Region 3

Tecolotito Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 27 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-four of the 27 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 52570, Sodium Region 3

Tecolotito Creek

LOE ID:	80927
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 13 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52570, Sodium **Region 3**

Tecolotito Creek

LOE ID:	80853
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	11

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**52706**	**Region 3**
Tecolotito Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Glen Annie/Los Carneros Creek Nitrate TMDL
TMDL Project Code:	1057
Date TMDL Approved by USEPA:	07/31/2014
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Five of the 76 nitrate samples and zero of 12 nitrate/nitrite samples exceed the water quality objectives for the Agricultural beneficial use. Fifty-five of the 76 nitrate samples and eight of 12 nitrate/nitrite samples

exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. In addition, 12 of the 12 nitrate samples and 12 of the 12 nitrate/nitrite samples exceed the evaluation guidelines for Cold and Warm Freshwater Habitat to protect against bio-stimulation and eutrophic conditions. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat:
1) Dissolved oxygen for this water body ranged from 5.78 mg/L to 14.83 mg/L, at times exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Floating mats ranged from 0 to 75% cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration peaked at 24 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 1.04 mg/L to 4.07 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 24 g/m2 ash-free dry weight (AFDW) to 98 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 60 mg/m2 to 246 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-five of the 76 nitrate samples and eight of 12 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Glen Annie/Los Carneros Creek Nitrate TMDL has been approved by USEPA.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	81059
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	12

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	81063
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 5 of 49 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	80881
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]

Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	80880
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	80877
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	81114
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	49
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 36 of 49 samples exceed the criterion for Nitrate as

	N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	80875
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	80866
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	80864
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	80999
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	80854
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52706, Nitrate **Region 3**

Tecolotito Creek

LOE ID:	80855
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	52601	Region 3
Tecolotito Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located below the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Tecolotito Creek. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 26 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 27 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52601, Ammonia	**Region 3**
Tecolotito Creek	

LOE ID:	80852
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52601, Ammonia **Region 3**

Tecolotito Creek

LOE ID:	80956
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52601, Ammonia **Region 3**

Tecolotito Creek

LOE ID:	80884
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52601, Ammonia **Region 3**

Tecolotito Creek

LOE ID:	80958
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52601, Ammonia **Region 3**

Tecolotito Creek

LOE ID:	80861
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52601, Ammonia **Region 3**

Tecolotito Creek

LOE ID:	80955
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52529**	**Region 3**
Tecolotito Creek		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated reach of the creek (Tecolotito Creek which is mapped from Highway101 to the Goleta Slough). These LOEs and the decision language will be associated with a new decision for Tecolotito Creek. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52529, Arsenic	**Region 3**
Tecolotito Creek	

LOE ID:	80886

Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52529, Arsenic **Region 3**

Tecolotito Creek

LOE ID:	80885
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52725**	**Region 3**
Tecolotito Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated reach of the creek (Tecolotito Creek which is mapped from Highway101 to the Goleta Slough). These LOEs and the decision language will be associated with a new decision for Tecolotito Creek. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 27 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 27 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52725, Boron **Region 3**

Tecolotito Creek

LOE ID:	81082
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52725, Boron **Region 3**

Tecolotito Creek

LOE ID:	81077
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply

Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	52558	Region 3
Tecolotito Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 25 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52558, Chlorophyll-a **Region 3**

Tecolotito Creek

LOE ID:	80915
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 3/7/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52558, Chlorophyll-a **Region 3**

Tecolotito Creek

LOE ID:	80912
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 3/7/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52558, Chlorophyll-a **Region 3**

Tecolotito Creek

LOE ID:	80882
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52558, Chlorophyll-a **Region 3**

Tecolotito Creek

LOE ID:	80883
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**52652**	**Region 3**
Tecolotito Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Nine of the 85 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and zero of the 85 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Twenty-nine of the 165 samples are below 85% saturation, but the median of the data does not exceed (fall below) the Objective. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 85 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and zero of the 85 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	81001
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	81015
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	81006
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	81007
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	81009
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 26 of 56 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	80990
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	80992
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	80993
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	56
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 9 of 56 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	80998
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced

	below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	80984
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved — Region 3

Tecolotito Creek

LOE ID:	81028
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved — Region 3

Tecolotito Creek

LOE ID:	80873
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	80874
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	80876
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	80878
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52652, Oxygen, Dissolved **Region 3**

Tecolotito Creek

LOE ID:	81003
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 26 of 56 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID	52610	Region 3
Tecolotito Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Five lines of evidence are available in the administrative record to assess this pollutant. Four of the 178 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 178 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52610, Specific Conductivity	**Region 3**

Tecolotito Creek

LOE ID:	80967
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	101
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 101 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52610, Specific Conductivity **Region 3**

Tecolotito Creek

LOE ID:	80969
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52610, Specific Conductivity **Region 3**

Tecolotito Creek

LOE ID:	80862
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [315GAN - Glenn Annie Creek, 315GBR - Glenn Annie Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52610, Specific Conductivity **Region 3**

Tecolotito Creek

LOE ID:	80868
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52610, Specific Conductivity **Region 3**

Tecolotito Creek

LOE ID:	80970
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **52619** **Region 3**

Tecolotito Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 83 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 83 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52619, Temperature, water **Region 3**

Tecolotito Creek

LOE ID:	80973
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52619, Temperature, water **Region 3**

Tecolotito Creek

LOE ID:	80863
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52619, Temperature, water **Region 3**

Tecolotito Creek

LOE ID:	80976
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52619, Temperature, water **Region 3**

Tecolotito Creek

LOE ID:	80975
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52577**	**Region 3**
Tecolotito Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. Eight lines of evidence are available in the administrative record to assess this pollutant. Four of the 83 samples exceed the evaluation guideline for cold freshwater habitat (Sigler et al. 1984) and eight of the 163 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 83 samples exceed the evaluation guideline for cold freshwater habitat and eight of the 163 samples exceed the warm freshwater habitat evaluation guideline. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52577, Turbidity **Region 3**

Tecolotito Creek

LOE ID:	80925
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 47 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52577, Turbidity **Region 3**

Tecolotito Creek

LOE ID:	80879
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52577, Turbidity **Region 3**

Tecolotito Creek

LOE ID:	80934
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52577, Turbidity **Region 3**

Tecolotito Creek

LOE ID:	80924
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [

	315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52577, Turbidity **Region 3**

Tecolotito Creek

LOE ID:	80923
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52577, Turbidity **Region 3**

Tecolotito Creek

LOE ID:	80921

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring sites [GA1 - Glenn Annie Creek at Holliste]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52577, Turbidity **Region 3**

Tecolotito Creek

LOE ID:	80865
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52577, Turbidity **Region 3**

Tecolotito Creek

LOE ID:	80932
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]

Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52739 **Region 3**

Tecolotito Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. One of the 29 samples exceed the water quality objective for Agricultural Supply. Zero of the 29 samples exceed the water quality objectives for Warm and Cold Freshwater Habitats. Two of the 29 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 29 samples exceed the water quality objective for Agricultural Supply. Zero of the 29 samples exceed the water quality objectives for Warm and Cold Freshwater Habitats. Two of the 29 samples exceed the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	81096
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	81058
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	81060
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80888
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80889
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80894
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80895
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	81047
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	81049
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80867
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80869
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80872

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	81089
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80856
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80857
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	81090
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	81095
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52739, pH **Region 3**

Tecolotito Creek

LOE ID:	80860
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52722** **Region 3**

Tecolotito Creek

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Note Â– No new data have been assessed. This decision has been revised to reflect a mapping change. This decision was previously associated with the water segment names Glen Annie Canyon and it has now been moved to this water segment named Tecolotito Creek. Two lines of evidence are available in the administrative record to assess this pollutant. Thirty-six of the 53 samples exceed the USEPA criterion. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-six of the 53 samples exceed the single sample maximum for protection of Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52722, Enterococcus **Region 3**

Tecolotito Creek

LOE ID:	81075
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	36
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 36 of 53 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 52722, Enterococcus **Region 3**

Tecolotito Creek

LOE ID:	81079
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID 52539 Region 3

Tecolotito Creek

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated reach of the creek (Tecolotito Creek which is mapped from Highway101 to the Goleta Slough). These LOEs and the decision language will be associated with a new decision for Tecolotito Creek. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52539, Anthracene — Region 3

Tecolotito Creek

LOE ID:	80896
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52539, Anthracene **Region 3**

Tecolotito Creek

LOE ID:	80887
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52544 Region 3

Tecolotito Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated reach of the creek (Tecolotito Creek which is mapped from Highway101 to the Goleta Slough). These LOEs and the decision language will be associated with a new decision for Tecolotito Creek. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52544, Benzo(a)anthracene Region 3

Tecolotito Creek

LOE ID:	80901
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52544, Benzo(a)anthracene **Region 3**

Tecolotito Creek

LOE ID:	80898
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52731 Region 3
Tecolotito Creek

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated reach of the creek (Tecolotito Creek which is mapped from Highway101 to the Goleta Slough). These LOEs and the decision language will be associated with a new decision for Tecolotito Creek. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52731, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3
Tecolotito Creek

LOE ID:	81088

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52731, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Tecolotito Creek

LOE ID:	81087
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52688**	**Region 3**
Tecolotito Creek		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated reach of the creek (Tecolotito Creek which is mapped from Highway101 to the Goleta Slough). These LOEs and the decision language will be associated with a new decision for Tecolotito Creek. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52688, Cadmium **Region 3**

Tecolotito Creek

LOE ID:	81045
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52688, Cadmium **Region 3**

Tecolotito Creek

LOE ID:	81044
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52547**	**Region 3**
Tecolotito Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge. Those data are now associated with decisions for the water segment named Glen Annie Canyon Creek. Data associated with this decision are from monitoring stations located on Tecolotito Creek which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the two water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of two water samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. However, due to a mapping change, the original decision using this data was associated with Glen Annie Canyon

Line of Evidence (LOE) for Decision ID 52547, Chlorpyrifos **Region 3**

Tecolotito Creek

LOE ID:	80904
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52547, Chlorpyrifos **Region 3**

Tecolotito Creek

LOE ID:	80899
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	52632	Region 3
Tecolotito Creek		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52632, Chromium	**Region 3**
Tecolotito Creek	

LOE ID:	80989
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52632, Chromium **Region 3**

Tecolotito Creek

LOE ID:	80986
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]

Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52607 **Region 3**

Tecolotito Creek

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52607, Chrysene (C1-C4) **Region 3**

Tecolotito Creek

LOE ID:	80977
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52607, Chrysene (C1-C4) **Region 3**

Tecolotito Creek

LOE ID:	80964
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	52602	Region 3
Tecolotito Creek		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52602, Copper	Region 3

Tecolotito Creek

LOE ID:	80959
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52602, Copper **Region 3**

Tecolotito Creek

LOE ID:	80957
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52745**	**Region 3**
Tecolotito Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52745, Diazinon **Region 3**

Tecolotito Creek

LOE ID:	81083
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 52745, Diazinon **Region 3**

Tecolotito Creek

LOE ID:	81102
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **52586** **Region 3**

Tecolotito Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52586, Dieldrin **Region 3**

Tecolotito Creek

LOE ID:	80943
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52586, Dieldrin **Region 3**

Tecolotito Creek

LOE ID:	80942
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	52546	Region 3
Tecolotito Creek		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52546, Endrin	**Region 3**
Tecolotito Creek	

LOE ID:	80900
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52546, Endrin **Region 3**

Tecolotito Creek

LOE ID:	80903
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [

	315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52655 Region 3

Tecolotito Creek

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52655, Fluoranthene Region 3

Tecolotito Creek

LOE ID:	81012
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52655, Fluoranthene **Region 3**

Tecolotito Creek

LOE ID:	81014
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52643**	**Region 3**
Tecolotito Creek		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52643, Fluorene **Region 3**

Tecolotito Creek

LOE ID:	81000
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52643, Fluorene **Region 3**

Tecolotito Creek

LOE ID:	80997
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52597**	**Region 3**
Tecolotito Creek		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence

of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52597, Lead **Region 3**

Tecolotito Creek

LOE ID:	80954
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52597, Lead **Region 3**

Tecolotito Creek

LOE ID:	80953

Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **52595** **Region 3**

Tecolotito Creek

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52595, Mercury **Region 3**

Tecolotito Creek

LOE ID:	80952
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52595, Mercury **Region 3**

Tecolotito Creek

LOE ID:	80951
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **52583** **Region 3**

Tecolotito Creek

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52583, Naphthalene **Region 3**

Tecolotito Creek

LOE ID:	80940
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52583, Naphthalene **Region 3**

Tecolotito Creek

LOE ID:	80937
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52574 **Region 3**

Tecolotito Creek

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52574, Nickel — Region 3

Tecolotito Creek

LOE ID:	80931
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52574, Nickel **Region 3**

Tecolotito Creek

LOE ID:	80929
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52589 Region 3

Tecolotito Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52589, Phenanthrene Region 3

Tecolotito Creek

LOE ID:	80939
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52589, Phenanthrene **Region 3**

Tecolotito Creek

LOE ID:	80946
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52579**	**Region 3**
Tecolotito Creek		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52579, Pyrene	**Region 3**
Tecolotito Creek	

LOE ID:	80933
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52579, Pyrene **Region 3**

Tecolotito Creek

LOE ID:	80936
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0

	of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52550**	**Region 3**
Tecolotito Creek		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note Â– This decision has been revised to reflect a mapping change which resulted in the disassociation of data for stations located on this waterway but above the Highway 101 Bridge (now called Glen Annie Canyon Creek). Data associated with this decision are from monitoring stations located on Tecolotito Creek, which is mapped from Highway101 to the Goleta Slough. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 52550, Zinc **Region 3**

Tecolotito Creek

LOE ID:	80907
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52550, Zinc **Region 3**

Tecolotito Creek

LOE ID:	80906
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Scott Creek Lagoon**
Water Body ID: **CAR3041102020160427053897**
Water Body Type: **River & Stream**

DECISION ID	50863	Region 3
Scott Creek Lagoon		

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

In the 2014 assessment cycle, the mapped representation of Scott Creek has been split into two segments; one segment delineates the lagoon and is the location of the monitoring stations 304SCO and 304SCT_CCL and the second segment is mapped from the headwaters to the lagoon and contains monitoring station 304SCM. This decision for Scott Creek Lagoon includes all LOEs for stations located in the Lagoon segment, including those LOEs that were previously associated with the decision for the upstream Creek as well as new LOEs.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 94 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 115 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. zero of the 94 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 115 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly

mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50863, Ammonia **Region 3**

Scott Creek Lagoon

LOE ID:	80496
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50863, Ammonia **Region 3**

Scott Creek Lagoon

LOE ID:	80402
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50863, Ammonia **Region 3**

Scott Creek Lagoon

LOE ID:	80459
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50863, Ammonia **Region 3**

Scott Creek Lagoon

LOE ID:	80390
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50863, Ammonia **Region 3**

Scott Creek Lagoon

LOE ID:	80495
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID **50837** **Region 3**

Scott Creek Lagoon

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 90 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 90 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50837, Boron **Region 3**

Scott Creek Lagoon

LOE ID:	80391
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50837, Boron **Region 3**

Scott Creek Lagoon

LOE ID:	80433
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50920** **Region 3**

Scott Creek Lagoon

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 93 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 93 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50920, Chlorophyll-a **Region 3**

Scott Creek Lagoon

LOE ID:	80516
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50920, Chlorophyll-a **Region 3**

Scott Creek Lagoon

LOE ID:	80510
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50920, Chlorophyll-a **Region 3**

Scott Creek Lagoon

LOE ID:	80401
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50834**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 39 samples exceed the Water Contact Recreation water quality objective and none of the samples exceed the Non-Contact Recreation water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 39 samples exceed the Water Contact Recreation water quality objective and none of the samples exceed the Non-Contact Recreation water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50834, Enterococcus	**Region 3**

Scott Creek Lagoon

LOE ID:	80428
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50834, Enterococcus **Region 3**

Scott Creek Lagoon

LOE ID:	80430
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID	**50852**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Six of 104 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 64 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 104 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 64 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50852, Escherichia coli (E. coli) Region 3

Scott Creek Lagoon

LOE ID:	80454
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected on a single day 8/2/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50852, Escherichia coli (E. coli) Region 3

Scott Creek Lagoon

LOE ID:	80453
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected on a single day 8/2/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50852, Escherichia coli (E. coli) **Region 3**

Scott Creek Lagoon

LOE ID:	80448
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]

Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50852, Escherichia coli (E. coli) **Region 3**

Scott Creek Lagoon

LOE ID:	80445
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50852, Escherichia coli (E. coli) **Region 3**

Scott Creek Lagoon

LOE ID:	80467
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50852, Escherichia coli (E. coli) **Region 3**

Scott Creek Lagoon

LOE ID:	80465
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50852, Escherichia coli (E. coli) **Region 3**

Scott Creek Lagoon

LOE ID:	80450
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 3 of 40 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50873** **Region 3**

Scott Creek Lagoon

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Ten of 93 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 1 of 93 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 93 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 93 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50873, Fecal Coliform **Region 3**

Scott Creek Lagoon

LOE ID:	80469
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	52
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 52 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50873, Fecal Coliform **Region 3**

Scott Creek Lagoon

LOE ID:	80466
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50873, Fecal Coliform **Region 3**

Scott Creek Lagoon

LOE ID:	80464
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50873, Fecal Coliform **Region 3**

Scott Creek Lagoon

LOE ID:	80463
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	52
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 7 of 52 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50883**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Zero of the 143 nitrate samples exceed the water quality objective for agricultural uses. One of the 143 nitrate samples exceed the water quality objective for municipal and domestic supply use (i.e. drinking water). The most recent 41 samples (collected in between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Zero of the 41 samples exceed the evaluation guideline and there is no supporting evidence indicating high risk for,

or occurrence of, eutrophication.
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 143 nitrate samples exceed the water quality objective for agricultural uses. One of the 143 nitrate samples exceed the water quality objective for municipal and domestic supply use (i.e. drinking water). Zero of the 41 samples exceed the evaluation guideline and there is no supporting evidence indicating high risk for, or occurrence of, eutrophication.
These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80400
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80406
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80407
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80479
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80480
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not

	contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80481
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80398
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80410

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80411
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80485
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80486
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50883, Nitrate **Region 3**

Scott Creek Lagoon

LOE ID:	80487
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**53379**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the 41 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 41 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

	Note: This decision is a new decision for the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53379, Nitrogen, Nitrite **Region 3**

Scott Creek Lagoon

LOE ID:	80405
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50818** **Region 3**

Scott Creek Lagoon

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. One of the 106 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 106 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50818, Oxygen, Dissolved **Region 3**

Scott Creek Lagoon

LOE ID:	80413
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50818, Oxygen, Dissolved **Region 3**

Scott Creek Lagoon

LOE ID:	80396
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50818, Oxygen, Dissolved **Region 3**

Scott Creek Lagoon

LOE ID:	80414
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 9 of 54 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50818, Oxygen, Dissolved **Region 3**

Scott Creek Lagoon

LOE ID:	80503
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50818, Oxygen, Dissolved **Region 3**

Scott Creek Lagoon

LOE ID:	80394
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 6 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50818, Oxygen, Dissolved **Region 3**

Scott Creek Lagoon

LOE ID:	80501
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/24/2002-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50818, Oxygen, Dissolved **Region 3**

Scott Creek Lagoon

LOE ID:	80505
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50874** **Region 3**

Scott Creek Lagoon

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Four of the 105 samples exceed the water quality

objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 105 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50874, Specific Conductivity **Region 3**

Scott Creek Lagoon

LOE ID:	80471
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50874, Specific Conductivity **Region 3**

Scott Creek Lagoon

LOE ID:	80387
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50874, Specific Conductivity **Region 3**

Scott Creek Lagoon

LOE ID:	80473
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50874, Specific Conductivity **Region 3**

Scott Creek Lagoon

LOE ID:	80470
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

Data Reference:	Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us). Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**50843**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 107 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 107 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was

transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50843, Temperature, water **Region 3**

Scott Creek Lagoon

LOE ID:	80436
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50843, Temperature, water **Region 3**

Scott Creek Lagoon

LOE ID:	80399
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50843, Temperature, water **Region 3**

Scott Creek Lagoon

LOE ID:	80439
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50843, Temperature, water **Region 3**

Scott Creek Lagoon

LOE ID:	80437
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50850 Region 3

Scott Creek Lagoon

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 97 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 97 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50850, Turbidity Region 3

Scott Creek Lagoon

LOE ID:	80392
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50850, Turbidity **Region 3**

Scott Creek Lagoon

LOE ID:	80446
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50850, Turbidity **Region 3**

Scott Creek Lagoon

LOE ID:	80444
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/24/2002-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50850, Turbidity **Region 3**

Scott Creek Lagoon

LOE ID:	80442
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 3 of 47 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50820** **Region 3**

Scott Creek Lagoon

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Two of the 105 samples exceed the water quality objective for Agriculture, and three of the 105 samples exceed the water quality objective for Cold Freshwater Habitats, and four of the 105 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 105 samples exceed the water quality objective for Agriculture, and three of the 105 samples exceed the water quality objective for Cold Freshwater Habitats, and four of the 105 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80397
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80393
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80409
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80408
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80404
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80514
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80416
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80415
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-

	Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80424
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80491
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80422
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80421
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-

	Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80420
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80419
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80508
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80504
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80502
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80434
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80519
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and

	Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50820, pH **Region 3**

Scott Creek Lagoon

LOE ID:	80517
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50893 Region 3

Scott Creek Lagoon

Pollutant:	**Chloride**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 90 samples exceed the water quality objective for Agricultural Supply. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty of the 90 samples exceed the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment.

Line of Evidence (LOE) for Decision ID 50893, Chloride — Region 3

Scott Creek Lagoon

LOE ID:	80389
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	13

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 13 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50893, Chloride **Region 3**

Scott Creek Lagoon

LOE ID:	80489
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 7 of 49 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50886**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Sodium**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 89 samples exceed the water quality objective for Agricultural Supply. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of the 89 samples exceed the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment.

Line of Evidence (LOE) for Decision ID 50886, Sodium **Region 3**

Scott Creek Lagoon

LOE ID:	80482
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 7 of 49 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50886, Sodium **Region 3**

Scott Creek Lagoon

LOE ID:	80403
Pollutant:	Sodium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 12 of 40 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50855**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample

size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50855, Anthracene **Region 3**

Scott Creek Lagoon

LOE ID:	80451
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50865	Region 3
Scott Creek Lagoon		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the

	assessment data base.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50865, Arsenic **Region 3**

Scott Creek Lagoon

LOE ID:	80461
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50830** **Region 3**

Scott Creek Lagoon

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50830, Benzo(a)anthracene **Region 3**

Scott Creek Lagoon

LOE ID:	80426
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50928**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50928, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Scott Creek Lagoon

LOE ID:	80524
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	50864	Region 3
Scott Creek Lagoon		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50864, Cadmium	**Region 3**
Scott Creek Lagoon	

LOE ID:	80460
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50925	Region 3
Scott Creek Lagoon		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero pore water samples exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. The single sample collected is not used in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50925, Chlorpyrifos **Region 3**

Scott Creek Lagoon

LOE ID:	80521
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Chlorpyrifos. The single sample result was non-detect and the reporting limit was greater than the evaluation guideline therefore, the results could not be quantified within the confidence of the Listing Policy.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50847**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50847, Chromium **Region 3**

Scott Creek Lagoon

LOE ID:	80443
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50833	Region 3
Scott Creek Lagoon		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50833, Chrysene (C1-C4)	**Region 3**
Scott Creek Lagoon	

LOE ID:	80429
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50879**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50879, Copper **Region 3**

Scott Creek Lagoon

LOE ID:	80475
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50862	Region 3
Scott Creek Lagoon		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Additionally, pore water results will not be the sole basis for any decision. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50862, Diazinon **Region 3**

Scott Creek Lagoon

LOE ID:	80458
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50904** **Region 3**

Scott Creek Lagoon

Pollutant: **Dieldrin**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50904, Dieldrin **Region 3**

Scott Creek Lagoon

LOE ID:	80500
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50929** **Region 3**

Scott Creek Lagoon

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50929, Endrin **Region 3**

Scott Creek Lagoon

LOE ID:	80525
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50903	Region 3
Scott Creek Lagoon		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50903, Fluoranthene	Region 3

Scott Creek Lagoon

LOE ID:	80499
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50902**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to

result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50902, Fluorene **Region 3**

Scott Creek Lagoon

LOE ID:	80498
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50829**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was

transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50829, Lead **Region 3**

Scott Creek Lagoon

LOE ID:	80425
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50842** **Region 3**

Scott Creek Lagoon

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50842, Mercury **Region 3**

Scott Creek Lagoon

LOE ID:	80438
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1].
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50926	Region 3
Scott Creek Lagoon		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50926, Naphthalene **Region 3**

Scott Creek Lagoon

LOE ID:	80522
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50892	Region 3
Scott Creek Lagoon		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50892, Nickel **Region 3**

Scott Creek Lagoon

LOE ID:	80488
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50896	Region 3
Scott Creek Lagoon		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to

result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50896, Phenanthrene **Region 3**

Scott Creek Lagoon

LOE ID:	80492
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50816**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was

transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50816, Pyrene **Region 3**

Scott Creek Lagoon

LOE ID:	80412
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50927** **Region 3**

Scott Creek Lagoon

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy.

One line of evidence is available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. One sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity). The single sample did not exceed the water quality objectives for protection of aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the water quality objectives for protection of aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50927, Toxicity **Region 3**

Scott Creek Lagoon

LOE ID:	80523
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50853**	**Region 3**
Scott Creek Lagoon		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50853, Zinc **Region 3**

Scott Creek Lagoon

LOE ID:	80449
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Scott Creek (Santa Cruz County)**
Water Body ID: **CAR3041102020150306058513**
Water Body Type: **River & Stream**

DECISION ID **53423** **Region 3**
Scott Creek (Santa Cruz County)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle.

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 15 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53423, Ammonia **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	80841
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro/Santa Cruz Coastal watershed area is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53423, Ammonia **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	80840
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro/Santa Cruz Coastal watershed area is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53424 Region 3

Scott Creek (Santa Cruz County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 15 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53424, Boron **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81140
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	53425	Region 3
Scott Creek (Santa Cruz County)		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 15 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53425, Chloride	**Region 3**
Scott Creek (Santa Cruz County)	

LOE ID:	81143
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53426 Region 3

Scott Creek (Santa Cruz County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53426, Chlorophyll-a **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81152
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53431 Region 3

Scott Creek (Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceeded the water quality objectives for recreational uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceeded the water quality objectives for recreational uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53431, Escherichia coli (E. coli) Region 3

Scott Creek (Santa Cruz County)

LOE ID:	81171
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53431, Escherichia coli (E. coli) **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81167
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53431, Escherichia coli (E. coli) Region 3

Scott Creek (Santa Cruz County)

LOE ID:	81172
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53431, Escherichia coli (E. coli) **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81166
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 53432 **Region 3**

Scott Creek (Santa Cruz County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceeded the water quality objectives for recreational uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 14 samples exceeded the water quality objectives for recreational uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53432, Fecal Coliform **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81168
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53432, Fecal Coliform **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81173
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53434 Region 3

Scott Creek (Santa Cruz County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant.Zero of the 25 samples exceed the water quality objectives for Municipal and Domestic Supply (i.e. drinking water) and agricultural uses Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53434, Nitrate Region 3

Scott Creek (Santa Cruz County)

LOE ID:	81146
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53434, Nitrate **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81162
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53434, Nitrate **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81148
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53434, Nitrate **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81163
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **53429** **Region 3**

Scott Creek (Santa Cruz County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is fully supported. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53429, Oxygen, Dissolved **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81155
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek

	to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53429, Oxygen, Dissolved **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81154
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53429, Oxygen, Dissolved **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81156
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53429, Oxygen, Dissolved **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81153
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 53427 Region 3

Scott Creek (Santa Cruz County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a

minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 15 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53427, Sodium **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81151
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53430 Region 3

Scott Creek (Santa Cruz County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceeded the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53430, Specific Conductivity Region 3

Scott Creek (Santa Cruz County)

LOE ID:	81144
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53430, Specific Conductivity **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81145
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-23 - Lower SC, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 53433 Region 3

Scott Creek (Santa Cruz County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceeded the water quality objectives for recreational uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 28 samples exceeded the water quality objectives for recreational uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53433, Temperature, water **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81160
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53433, Temperature, water **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81159

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53428 Region 3

Scott Creek (Santa Cruz County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the eight samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53428, Turbidity **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81161
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53435 Region 3

Scott Creek (Santa Cruz County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Scott Creek but in the 2014 assessment cycle was transferred to the newly mapped Scott Creek (Santa Cruz County), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Two of the 28 samples exceed the water quality objectives for Agriculture, Drinking Water and Recreation and four of the 28 samples exceed the water quality objective for Cold Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 28 samples exceed the water quality objectives for Agriculture, Drinking Water and Recreation and four of the 28 samples exceed the water quality objective for Cold Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53435, pH Region 3

Scott Creek (Santa Cruz County)

LOE ID:	81164

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53435, pH **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81169
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53435, pH **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81170
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53435, pH **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81149
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53435, pH **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81165
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53435, pH **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81175
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor

	raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53435, pH **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81174
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53435, pH **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81158
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53435, pH **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81157
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results

	are as follows: 4 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53435, pH **Region 3**

Scott Creek (Santa Cruz County)

LOE ID:	81150
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arroyo De La Cruz Lagoon**
Water Body ID: **CAR3101200020160427053321**
Water Body Type: **River & Stream**

DECISION ID **50984** **Region 3**
Arroyo De La Cruz Lagoon

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen of the 64 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. However, only 4 of the 64 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 64 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80543
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80610
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80609
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 20 of 39 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80534
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 2 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80532
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	19
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 19 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80593
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 20 of 39 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80591
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80588
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80586
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80584
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 9 of 39 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]

Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80583
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80582
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80581
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50984, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80551
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 19 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50941	Region 3
Arroyo De La Cruz Lagoon		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Grazing-Related Sources | Natural Sources
TMDL Name:	Arroyo de la Cruz FIB TMDL
TMDL Project Code:	1067
Date TMDL Approved by USEPA:	01/30/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Seven of the 40 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 40 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The [TMDL NAME] was approved by USEPA on [MM/DD/YEAR].
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 50941, Escherichia coli (E. coli)	Region 3
Arroyo De La Cruz Lagoon	

LOE ID:	80565
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50941, Escherichia coli (E. coli) **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80567
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 1/10/2005-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50941, Escherichia coli (E. coli) Region 3

Arroyo De La Cruz Lagoon

LOE ID:	80558
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50941, Escherichia coli (E. coli) Region 3

Arroyo De La Cruz Lagoon

LOE ID:	80557
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 2 of 19 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50941, Escherichia coli (E. coli) Region 3

Arroyo De La Cruz Lagoon

LOE ID:	80556
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 19 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 1/10/2005-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50994**	**Region 3**
Arroyo De La Cruz Lagoon		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. combining the information from decisions for both unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 55 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 59 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 55 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50994, Ammonia **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80616
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50994, Ammonia **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80619

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50994, Ammonia **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80575
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50994, Ammonia **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80617
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [

	310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50994, Ammonia **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80618
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50994, Ammonia **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80620
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50947**	**Region 3**
Arroyo De La Cruz Lagoon		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 54 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 54 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50947, Boron **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80555
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50947, Boron **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80573
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50945** **Region 3**

Arroyo De La Cruz Lagoon

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station

310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 54 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 54 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50945, Chloride **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80554
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50945, Chloride **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80571
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50963 Region 3

Arroyo De La Cruz Lagoon

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One of the 59 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 59 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50963, Chlorophyll-a — Region 3

Arroyo De La Cruz Lagoon

LOE ID:	80568
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50963, Chlorophyll-a **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80587
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50963, Chlorophyll-a **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80585
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50963, Chlorophyll-a **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80589
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50963, Chlorophyll-a **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80537
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 18 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50963, Chlorophyll-a **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80541
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 18 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50936	Region 3
Arroyo De La Cruz Lagoon		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 59 samples exceed the water quality objective for contact recreation (i.e. swimming) and one of the 59 samples also exceeds the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 59 samples exceed the water quality objective for contact recreation (i.e. swimming) and one of the 59 samples also exceeds the water quality objective for non-contact recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50936, Fecal Coliform	Region 3
Arroyo De La Cruz Lagoon	

LOE ID:	80561
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 40

	samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50936, Fecal Coliform **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80562
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50936, Fecal Coliform **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80560
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50936, Fecal Coliform **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80559
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50982**	**Region 3**
Arroyo De La Cruz Lagoon		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Zero of the 61 nitrate samples exceed the water quality objectives for Agricultural Supply or Municipal and Domestic Supply (i.e. drinking water). Data collected since 2007 has also been compared to the evaluation guideline for aquatic life uses (Cold and Warm Freshwater Habitat). For these data, zero of the 19 samples exceed the evaluation guideline for nitrate.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 61 nitrate samples exceed the water quality objectives for Agricultural Supply or Municipal and Domestic Supply (i.e. drinking water) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80539
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80608
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50982, Nitrate — Region 3

Arroyo De La Cruz Lagoon

LOE ID:	80538
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50982, Nitrate — Region 3

Arroyo De La Cruz Lagoon

LOE ID:	80536
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80535
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the

	criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80606
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed

	in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80552
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80607
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80605
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80531
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80529
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50982, Nitrate **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80548
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52122** **Region 3**

Arroyo De La Cruz Lagoon

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 19 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52122, Nitrogen, Nitrite **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80547
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	50995	Region 3
Arroyo De La Cruz Lagoon		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 54 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 54 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50995, Sodium	Region 3
Arroyo De La Cruz Lagoon	

LOE ID:	80545
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the

	criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50995, Sodium **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80621
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50969** **Region 3**

Arroyo De La Cruz Lagoon

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 64 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 64 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50969, Specific Conductivity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80590
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50969, Specific Conductivity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80553
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the

	criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50969, Specific Conductivity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80592
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50969, Specific Conductivity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80594
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50969, Specific Conductivity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80595
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50940**	**Region 3**
Arroyo De La Cruz Lagoon		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo

de la Cruz.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 64 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 64 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50940, Temperature, water **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80526
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50940, Temperature, water **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80566
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50940, Temperature, water **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80563
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50940, Temperature, water **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80564
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50988	Region 3
Arroyo De La Cruz Lagoon		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Four of the 53 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and three of the 53 samples also exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 53 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and three of the 53 samples also exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50988, Turbidity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80549
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50988, Turbidity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80612
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/1/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50988, Turbidity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80611
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50988, Turbidity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80613
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/1/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50988, Turbidity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80614
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50988, Turbidity **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80528
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50978**	**Region 3**
Arroyo De La Cruz Lagoon		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	In the 2014 assessment cycle, the mapped representation of Arroyo de la Cruz has been split into two segments; the second segment delineates the lagoon and is the location of the monitoring station 310ADC. This decision for Arroyo de la Cruz Lagoon replaces a previous assessment cycle decision for Arroyo de la Cruz and includes all LOEs that were previously associated with the decision for Arroyo de la Cruz. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty four lines of evidence are available in the administrative record to assess this pollutant. One of the 63 samples exceed the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. of the 63 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80570
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80572
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80574
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80550
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80542
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80544
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for pH.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80546
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80596
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80527
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80597
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80598
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80599
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80600
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80601
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80602
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80530
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80603
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]

Temporal Representation: Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID: 80604

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 4

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]

Temporal Representation: Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80576
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80577
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80578
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80579
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80580
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50978, pH **Region 3**

Arroyo De La Cruz Lagoon

LOE ID:	80569
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor

	raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Waddell Creek Lagoon**
Water Body ID: **CAR3041101020150306053599**
Water Body Type: **River & Stream**

DECISION ID **51030** **Region 3**
Waddell Creek Lagoon

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

Five lines of evidence are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 94 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 116 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51030, Ammonia **Region 3**
Waddell Creek Lagoon

LOE ID:	80677
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51030, Ammonia **Region 3**

Waddell Creek Lagoon

LOE ID:	80676
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51030, Ammonia **Region 3**

Waddell Creek Lagoon

LOE ID:	80625
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51030, Ammonia **Region 3**

Waddell Creek Lagoon

LOE ID:	80671
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51030, Ammonia **Region 3**

Waddell Creek Lagoon

LOE ID:	80641
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51031**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 90 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 90 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51031, Boron **Region 3**

Waddell Creek Lagoon

LOE ID:	80645
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51031, Boron **Region 3**

Waddell Creek Lagoon

LOE ID:	80672
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 50 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51091** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is

located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 94 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 94 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51091, Chlorophyll-a **Region 3**

Waddell Creek Lagoon

LOE ID:	80730
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51091, Chlorophyll-a **Region 3**

Waddell Creek Lagoon

LOE ID:	80732
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51091, Chlorophyll-a **Region 3**

Waddell Creek Lagoon

LOE ID:	80636
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51054** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Seven of 106 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 67 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 106 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 67 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51054, Escherichia coli (E. coli) **Region 3**

Waddell Creek Lagoon

LOE ID:	80692
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51054, Escherichia coli (E. coli) Region 3

Waddell Creek Lagoon

LOE ID:	80695
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period

	exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51054, Escherichia coli (E. coli) Region 3

Waddell Creek Lagoon

LOE ID:	80698
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51054, Escherichia coli (E. coli) — Region 3

Waddell Creek Lagoon

LOE ID:	80690
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51054, Escherichia coli (E. coli) — Region 3

Waddell Creek Lagoon

LOE ID:	80684
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51054, Escherichia coli (E. coli) **Region 3**

Waddell Creek Lagoon

LOE ID:	80686
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 51054, Escherichia coli (E. coli) **Region 3**

Waddell Creek Lagoon

LOE ID:	80688
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID **51087** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Seven of 94 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 94 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 94 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 94 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51087, Fecal Coliform **Region 3**

Waddell Creek Lagoon

LOE ID:	80725
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51087, Fecal Coliform **Region 3**

Waddell Creek Lagoon

LOE ID:	80726
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51087, Fecal Coliform **Region 3**

Waddell Creek Lagoon

LOE ID:	80724
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 55 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51087, Fecal Coliform **Region 3**

Waddell Creek Lagoon

LOE ID:	80728
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51025**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 147 nitrate samples exceed the water quality objectives for agricultural uses and for municipal and domestic supply use (i.e. drinking water). The most recent 40 samples (collected in between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Zero of the 40 samples exceed the evaluation guideline and there is no supporting evidence indicating high risk for, or occurrence of, eutrophication. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 147 nitrate samples exceed the water quality objectives for agricultural uses and for municipal and domestic supply use (i.e. drinking water). Zero of the 40 samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80637
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80638
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80639
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]

Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80640
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80666

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80633
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80634
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80658
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]

Temporal Representation:	Data was collected over the time period 2/23/1999-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80659
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80660
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80662
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80663
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]

Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80664
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51025, Nitrate **Region 3**

Waddell Creek Lagoon

LOE ID:	80665
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 2/23/1999-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**53064**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 40 samples exceed the water quality objective for agricultural supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 40 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53064, Nitrogen, Nitrite **Region 3**

Waddell Creek Lagoon

LOE ID:	80644
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51075** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. One of the 110 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 110 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51075, Oxygen, Dissolved **Region 3**

Waddell Creek Lagoon

LOE ID:	80708
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51075, Oxygen, Dissolved **Region 3**

Waddell Creek Lagoon

LOE ID:	80710
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51075, Oxygen, Dissolved **Region 3**

Waddell Creek Lagoon

LOE ID:	80712
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51075, Oxygen, Dissolved **Region 3**

Waddell Creek Lagoon

LOE ID:	80716
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51075, Oxygen, Dissolved **Region 3**

Waddell Creek Lagoon

LOE ID:	80632
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51075, Oxygen, Dissolved **Region 3**

Waddell Creek Lagoon

LOE ID:	80713
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 56 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51075, Oxygen, Dissolved — Region 3

Waddell Creek Lagoon

LOE ID:	80714
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 6 of 56 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51075, Oxygen, Dissolved — Region 3

Waddell Creek Lagoon

LOE ID:	80630
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51013**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Six lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 109 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 109 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51013, Specific Conductivity **Region 3**

Waddell Creek Lagoon

LOE ID:	80622
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 5 of 40 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51013, Specific Conductivity **Region 3**

Waddell Creek Lagoon

LOE ID:	80650
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51013, Specific Conductivity **Region 3**

Waddell Creek Lagoon

LOE ID:	80654
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 6 of 56

	samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51013, Specific Conductivity **Region 3**

Waddell Creek Lagoon

LOE ID:	80652
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51013, Specific Conductivity **Region 3**

Waddell Creek Lagoon

LOE ID:	80653
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51013, Specific Conductivity **Region 3**

Waddell Creek Lagoon

LOE ID:	80651
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**51028**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Ten of the 111 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 111 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51028, Temperature, water **Region 3**

Waddell Creek Lagoon

LOE ID:	80668
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [

	304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51028, Temperature, water **Region 3**

Waddell Creek Lagoon

LOE ID:	80667
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51028, Temperature, water **Region 3**

Waddell Creek Lagoon

LOE ID:	80661
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51028, Temperature, water **Region 3**

Waddell Creek Lagoon

LOE ID:	80626
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51028, Temperature, water **Region 3**

Waddell Creek Lagoon

LOE ID:	80669
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 4 of 56 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]

Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51056** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 98 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 98 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51056, Turbidity **Region 3**

Waddell Creek Lagoon

LOE ID:	80700
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51056, Turbidity **Region 3**

Waddell Creek Lagoon

LOE ID:	80694
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 4 of 49 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51056, Turbidity **Region 3**

Waddell Creek Lagoon

LOE ID:	80627
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 51056, Turbidity **Region 3**

Waddell Creek Lagoon

LOE ID:	80697
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51015** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Chloride**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Fifty of the 90 samples exceed the water quality objective for Agricultural Supply. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty of the 90 samples exceed the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) List. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment.

Line of Evidence (LOE) for Decision ID 51015, Chloride **Region 3**

Waddell Creek Lagoon

LOE ID:	80656
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 16 of 50 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51015, Chloride **Region 3**

Waddell Creek Lagoon

LOE ID:	80623
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 34 of 40 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51029	Region 3
Waddell Creek Lagoon		

Pollutant:	**Sodium**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Forty-nine of the 90 samples exceed the water quality objective for Agricultural Supply. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-nine of the 90 samples exceed the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) List. However, the monitoring station is tidally influenced and therefore the elevated chloride can be explained by the brackish nature of this water segment.

Line of Evidence (LOE) for Decision ID 51029, Sodium	Region 3
Waddell Creek Lagoon	

LOE ID:	80642
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 33 of 40 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51029, Sodium **Region 3**

Waddell Creek Lagoon

LOE ID:	80670
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 16 of 50

	samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51055**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Twenty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Twenty of the 109 samples exceed the water quality objective for Agriculture and Cold Freshwater Habitats. Twenty-two of the 109 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty lines of evidence are available in the administrative record to assess this pollutant. Five

beneficial uses are assessed. Twenty of the 109 samples exceed the water quality objective for Agriculture and Cold Freshwater Habitats. Twenty-two of the 109 samples exceed the water quality objectives for Drinking Water and Recreation. These exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded. However, the elevated pH is likely a natural condition.

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80646
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 5 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80718
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80717
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80631
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 5 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80715
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80643
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 5 of 40 samples exceed the criterion for pH.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80722
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]

Temporal Representation: Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID: 80721

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 56

Number of Exceedances: 11

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 11 of 56 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]

Temporal Representation: Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80720
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80719
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling

	(DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80635
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 5 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80628
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 7 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80701
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 9 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80699
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 12 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither

	be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80696
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80693
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80691
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80673
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80674
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 12 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80675
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80682
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation: Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID: 80683

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 4
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation: Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID: 80685

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80687
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51055, pH **Region 3**

Waddell Creek Lagoon

LOE ID:	80689
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 12 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	51014	Region 3
Waddell Creek Lagoon		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51014, Anthracene	**Region 3**
Waddell Creek Lagoon	

LOE ID:	80655
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51094**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater habitat beneficial use and this sample size is insufficient to determine, with the power

and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51094, Arsenic **Region 3**

Waddell Creek Lagoon

LOE ID:	80735
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51006** **Region 3**

Waddell Creek Lagoon

Pollutant: **Benzo(a)anthracene**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51006, Benzo(a)anthracene **Region 3**

Waddell Creek Lagoon

LOE ID:	80647
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51007** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51007, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Waddell Creek Lagoon

LOE ID:	80648
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51008** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was

created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51008, Cadmium **Region 3**

Waddell Creek Lagoon

LOE ID:	80649
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	51016	Region 3
Waddell Creek Lagoon		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Pore water samples will not be the sole basis for any decision.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51016, Chlorpyrifos **Region 3**

Waddell Creek Lagoon

LOE ID:	80657
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51093** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51093, Chromium **Region 3**

Waddell Creek Lagoon

LOE ID:	80734
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51092**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51092, Chrysene (C1-C4) **Region 3**

Waddell Creek Lagoon

LOE ID:	80733
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51090** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The sediment sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51090, Copper **Region 3**

Waddell Creek Lagoon

LOE ID:	80731
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51037**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51037, Diazinon **Region 3**

Waddell Creek Lagoon

LOE ID:	80678
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51088** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51088, Dieldrin **Region 3**

Waddell Creek Lagoon

LOE ID:	80729
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51086**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51086, Endrin **Region 3**

Waddell Creek Lagoon

LOE ID:	80727
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51070** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was

created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 39 samples exceed the water quality objectives for the Water Contact Recreation or Non-contact Recreation beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 39 samples exceed the water quality objectives for the Water Contact Recreation or Non-contact Recreation beneficial uses, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51070, Enterococcus **Region 3**

Waddell Creek Lagoon

LOE ID:	80711
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51070, Enterococcus **Region 3**

Waddell Creek Lagoon

LOE ID:	80709
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1].
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID **51066** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data are assessed. This decision has not changed from the 2010 listing cycle.

Conclusion:

Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51066, Fluoranthene **Region 3**

Waddell Creek Lagoon

LOE ID:	80707
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51065**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51065, Fluorene	**Region 3**
Waddell Creek Lagoon	

LOE ID:	80706
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51064**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in

2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51064, Lead **Region 3**

Waddell Creek Lagoon

LOE ID:	80705
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [

	304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 51063 Region 3

Waddell Creek Lagoon

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51063, Mercury Region 3

Waddell Creek Lagoon

LOE ID:	80704
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51062** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with

sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51062, Naphthalene **Region 3**

Waddell Creek Lagoon

LOE ID:	80703
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 51061 Region 3

Waddell Creek Lagoon

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51061, Nickel Region 3

Waddell Creek Lagoon

LOE ID:	80702
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51040**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51040, Phenanthrene **Region 3**

Waddell Creek Lagoon

LOE ID:	80681
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	51039	Region 3
Waddell Creek Lagoon		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51039, Pyrene	Region 3
Waddell Creek Lagoon	

LOE ID:	80680
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51082** **Region 3**

Waddell Creek Lagoon

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. One sample is summarized in LOEs using the

test organism as the pollutant (i.e. invertebrate toxicity). The single sample did not exceed the water quality objectives for protection of aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the water quality objectives for protection of aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51082, Toxicity **Region 3**

Waddell Creek Lagoon

LOE ID:	80723
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51038**	**Region 3**
Waddell Creek Lagoon		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. Note: This decision was formerly associated with Waddell Creek but in the 2014 assessment cycle was transferred to the newly mapped Waddell Creek Lagoon, where the monitoring station 304WAD is located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51038, Zinc **Region 3**

Waddell Creek Lagoon

LOE ID:	80679
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Los Osos Creek (Los Osos to Los Osos Creek Estuary)**
Water Body ID: **CAR3102300020150205055908**
Water Body Type: **River & Stream**

DECISION ID **51400** **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. One of the six samples exceeded the water quality objective for dissolved oxygen in Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the six samples exceeded the water quality objective and this is not enough data to determine if the beneficial use is supported or not. Therefore there is not enough evidence to remove this water segment from the List.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Los Osos Creek (Los Osos to Los Osos Creek Estuary), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water

quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 51400, Oxygen, Dissolved **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80776
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51400, Oxygen, Dissolved **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80775
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51400, Oxygen, Dissolved **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80780
Pollutant:	Low Dissolved Oxygen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51400, Oxygen, Dissolved **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80790
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 8/28/2002 3:30:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51400, Oxygen, Dissolved **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80782
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 8/28/2002 3:30:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID **51386** **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agriculture | Grazing-Related Sources
TMDL Name:	Los Osos Creek Nutrients
TMDL Project Code:	597
Date TMDL Approved by USEPA:	03/01/2005
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

In the 2014 assessment cycle, the pollutant name has been changed from 'Nutrients' to 'Nitrate' which is the pollutant addressed in the TMDL.

Five lines of evidence are available in the administrative record to assess this pollutant. The original listing decision was made by USEPA and the data supporting that decision are not available in this assessment database. More recent data shows that zero of six samples exceed the water quality objectives for Municipal and Domestic Supply and Agriculture and zero of six samples exceed the evaluation guidelines for protection of aquatic life from eutrophic effects. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section [NUMBER] of the Policy.
2. The data used satisfies the data quantity requirements of section NUMBER of the Policy.
3. The original listing decision was made by USEPA and the data supporting that decision are not available in this assessment database. More recent data shows that zero of six samples exceed the water quality objectives for Municipal and Domestic Supply and Agriculture and zero of six samples exceed the evaluation guidelines for protection of aquatic life from eutrophic effects. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. The Los Osos Creek, Warden Creek, and Warden Lake Wetland TMDL for Nutrients has been approved by USEPA.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Los Osos Creek (Los Osos to Los Osos Creek Estuary), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 51386, Nitrate **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80766
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51386, Nitrate **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80753
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51386, Nitrate **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80754
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51386, Nitrate **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80755
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP

QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51386, Nitrate **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80756
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 51389 **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle

Conclusion:

was transferred to the newly mapped Los Osos Creek (Los Osos to Los Osos Creek Estuary), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the nine samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51389, Specific Conductivity **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80769
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 51383 Region 3

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Los Osos Creek (Los Osos to Los Osos Creek Estuary), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the six samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51383, Temperature, water **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80763
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID **51384** **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle

Conclusion:

was transferred to the newly mapped Los Osos Creek (Los Osos to Los Osos Creek Estuary), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) but only 10 of the 101 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the six samples exceed the evaluation guideline for Cold Freshwater Habitat but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51384, Turbidity **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80764
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51384, Turbidity **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80760
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 51377 **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

Pollutant: pH

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the six samples exceed the water quality objectives for Agriculture, Cold and Warm Freshwater Habitats, Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the water quality objectives for Agriculture, Cold and Warm Freshwater Habitats, Drinking Water and Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Los Osos Creek (Los Osos to Los Osos Creek Estuary), where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51377, pH **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80797
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as

	follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51377, pH **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80794
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51377, pH **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80789
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51377, pH **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80757
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51377, pH **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80786
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51377, pH **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80799
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (Los Osos to Morro Bay) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (Los Osos to Morro Bay) was collected at 1 monitoring site [310LVR - Los Osos Creek]
Temporal Representation:	Data was collected over the time period 4/15/2003 2:00:00 PM-3/5/2010 12:25:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID 51427 Region 3

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Domestic Pet Waste | Grazing-Related Sources | Natural Sources | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Morro Bay Pathogens
TMDL Project Code:	22
Date TMDL Approved by USEPA:	01/20/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for delisting under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently

approved by USEPA on January 20, 2004.

LOE # 1907 is a placeholder for this listing which was made prior to 2006 when the assessment data base was initiated. The original listing was based on 10 years of data from the National monitoring Program in the Morro Bay Watershed. Two additional LOE summarize a single sample and the single sample does not exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of delisting this water segment-pollutant combination from the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51427, Fecal Coliform **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80807
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID 51425 **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Erosion/Siltation

TMDL Name:	Morro Bay Sediment
TMDL Project Code:	242
Date TMDL Approved by USEPA:	01/20/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for delisting under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. The Morro Bay Sediment TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004. No new data is available to evaluate this listing. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor removing this water segment-pollutant combination from the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51425, Sedimentation/Siltation **Region 3**

Los Osos Creek (Los Osos to Los Osos Creek Estuary)

LOE ID:	80805
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Los Osos Creek Estuary**
Water Body ID: **CAR3102300020150205055500**
Water Body Type: **River & Stream**

DECISION ID	51399	Region 3
Los Osos Creek Estuary		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Â‘Los Osos Creek EstuaryÂ’, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Forty-seven of the 98 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 28 of the 98 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-seven of the 98 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 28 of the 98 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 51399, Oxygen, Dissolved **Region 3**

Los Osos Creek Estuary

LOE ID:	80774
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 28 of 95 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51399, Oxygen, Dissolved **Region 3**

Los Osos Creek Estuary

LOE ID:	80781
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	91
Number of Exceedances:	64
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 64 of 91 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-

	Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51399, Oxygen, Dissolved **Region 3**

Los Osos Creek Estuary

LOE ID:	80773
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51399, Oxygen, Dissolved — Region 3

Los Osos Creek Estuary

LOE ID:	80783
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	91
Number of Exceedances:	64
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 64 of 91 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51399, Oxygen, Dissolved — Region 3

Los Osos Creek Estuary

LOE ID:	80779
Pollutant:	Low Dissolved Oxygen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51399, Oxygen, Dissolved **Region 3**

Los Osos Creek Estuary

LOE ID:	80778
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51399, Oxygen, Dissolved **Region 3**

Los Osos Creek Estuary

LOE ID:	80777
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 47 of 95 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID **51392** **Region 3**

Los Osos Creek Estuary

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agriculture | Grazing-Related Sources
TMDL Name:	Los Osos Creek Nutrients
TMDL Project Code:	597
Date TMDL Approved by USEPA:	03/01/2005
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Â'Los Osos Creek EstuaryÂ', where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. The original decision to add Los Osos Creek (specifically based on nitrate data from this station) to the 303(d) List for 'Nutrients' was made prior to the creation of this assessment data base. There are no data or documents associated with this decision. The pollutant name has been changed from 'Nutrients' to 'Nitrate'.

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. One of the 96 samples exceeds the water quality objective for municipal and domestic supply uses (i.e. drinking water). Thirty-four of the 93 samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). However, to determine if the aquatic life uses are negatively impacted by nitrate concentrations, the Central Coast Region requires supporting evidence indicating high risk for, or occurrence of, eutrophication. Los Oso Creek Estuary is also on the CWQ section 303(d) List due to low dissolved oxygen and therefore there is evidence of eutrophic conditions in this water segment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Thirty-four of the 93 samples exceed the Central Coast RegionÂ's evaluation guideline for protection of aquatic life uses from bio-stimulatory or eutrophic effects and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. Furthermore, Los Oso Creek Estuary is also on the CWQ section 303(d) List due to low dissolved oxygen and therefore there is evidence of eutrophic conditions in this water segment.
4. The Los Osos Creek Nutrients TMDL was approved by the RWQCB in December 2004 and subsequently approved by USEPA in March of 2005.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 51392, Nitrate **Region 3**

Los Osos Creek Estuary

LOE ID:	80774
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 28 of 95 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51392, Nitrate **Region 3**

Los Osos Creek Estuary

LOE ID:	80777
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 47 of 95 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51392, Nitrate **Region 3**

Los Osos Creek Estuary

LOE ID:	80752

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	93
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 34 of 93 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51392, Nitrate **Region 3**

Los Osos Creek Estuary

LOE ID:	80750
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	93
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos

	Creek Estuary to determine beneficial use support and results are as follows: 34 of 93 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51392, Nitrate **Region 3**

Los Osos Creek Estuary

LOE ID:	80751
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	93
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 1 of 93 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51392, Nitrate **Region 3**

Los Osos Creek Estuary

LOE ID:	80772
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51392, Nitrate **Region 3**

Los Osos Creek Estuary

LOE ID:	80768

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51392, Nitrate **Region 3**

Los Osos Creek Estuary

LOE ID:	80765
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

DECISION ID	**53189**	**Region 3**
Los Osos Creek Estuary		

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Â‘Los Osos Creek EstuaryÂ’, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Eight of the 51 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for Water Contact Recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 51 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53189, Enterococcus	**Region 3**
Los Osos Creek Estuary	

LOE ID: 80811

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 8 of 51 samples exceed the criterion for Enterococci.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in marine waters is 104 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 3/9/2005 1:43:00 PM-2/11/2010 11:40:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	**51381**	**Region 3**
Los Osos Creek Estuary		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Â'Los Osos Creek EstuaryÂ', where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two Three lines of evidence are available in the administrative record to assess this pollutant. Sixteen of the 98 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixteen of the 98 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51381, Temperature, water **Region 3**

Los Osos Creek Estuary

LOE ID:	80759
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51381, Temperature, water **Region 3**

Los Osos Creek Estuary

LOE ID:	80761
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 16 of 95 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	51430	Region 3
Los Osos Creek Estuary		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Â'Los Osos Creek EstuaryÂ', where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Three of the 96 samples exceed the water quality objectives for Agriculture, Drinking Water and Recreation. Fifteen of the 96 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 96 samples exceed the water quality objectives for Agriculture, Drinking Water and Recreation. Fifteen of the 96 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80788
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80795
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80793
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	93

Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 3 of 93 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80801
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80800
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	93
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 15 of 93 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80787
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 3 of 93 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80791
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	93
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 15 of 93 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80785
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80796
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	93
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 3 of 93

	samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80798
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80802
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	93
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 3 of 93 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51430, pH **Region 3**

Los Osos Creek Estuary

LOE ID:	80810
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**51390**	**Region 3**
Los Osos Creek Estuary		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Â‘Los Osos Creek EstuaryÂ’, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 95 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) but only nine of the 95 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of the 95 samples exceed the evaluation guideline for Cold Freshwater Habitat and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 51390, Turbidity **Region 3**

Los Osos Creek Estuary

LOE ID:	80767
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	92
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 19 of 92 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51390, Turbidity **Region 3**

Los Osos Creek Estuary

LOE ID:	80762
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51390, Turbidity **Region 3**

Los Osos Creek Estuary

LOE ID:	80758
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	92
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek Estuary to determine beneficial use support and results are as follows: 9 of 92 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).

Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Osos Creek Estuary was collected at 1 monitoring site [310SYB - Los Osos Creek Estuary, South Bay Blvd.]
Temporal Representation:	Data was collected over the time period 6/23/2002 2:45:00 PM-3/5/2010 10:18:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51390, Turbidity **Region 3**

Los Osos Creek Estuary

LOE ID:	80770
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **51429** **Region 3**

Los Osos Creek Estuary

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**

Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Domestic Pet Waste | Grazing-Related Sources | Natural Sources | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Morro Bay Pathogens
TMDL Project Code:	22
Date TMDL Approved by USEPA:	01/20/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Â‘Los Osos Creek EstuaryÂ’, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for delisting under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004. Three lines of evidence are available in the administrative record to assess this pollutant. LOE # 1907 is a placeholder for this listing which was made prior to 2006 when the assessment data base was initiated. The original listing was based on 10 years of data from the National monitoring Program in the Morro Bay Watershed. Two additional LOE summarize a single sample and the single sample does not exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of delisting this water segment-pollutant combination from the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51429, Fecal Coliform **Region 3**

Los Osos Creek Estuary

LOE ID:	80809
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51429, Fecal Coliform **Region 3**

Los Osos Creek Estuary

LOE ID:	80808
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51429, Fecal Coliform **Region 3**

Los Osos Creek Estuary

LOE ID:	80806
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID **51412** **Region 3**

Los Osos Creek Estuary

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Â‘Los Osos Creek EstuaryÂ’, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 2

samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Neither sample exceeds the water quality objective for Non-Contact Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 2 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Neither sample exceeds the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51412, Escherichia coli (E. coli) **Region 3**

Los Osos Creek Estuary

LOE ID:	80792
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51412, Escherichia coli (E. coli) **Region 3**

Los Osos Creek Estuary

LOE ID:	80784
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **51391** **Region 3**

Los Osos Creek Estuary

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note: This decision was formerly associated with Los Osos Creek but in the 2014 assessment cycle was transferred to the newly mapped Â‘Los Osos Creek EstuaryÂ’, where the monitoring stations associated with the LOEs in this decision are located. The 'Listing Year' associated with every LOE is

2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision.

One line of evidence is available in the administrative record to assess this pollutant. Two of the three samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the three samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 51391, Specific Conductivity **Region 3**

Los Osos Creek Estuary

LOE ID:	80771
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Carpinteria Creek (below Gobernador Creek)**
Water Body ID: **CAR3153400020150114040512**
Water Body Type: **River & Stream**

DECISION ID **50256** **Region 3**
Carpinteria Creek (below Gobernador Creek)

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. One of one water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. This decision will not use two of the water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Two of two sediment samples (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. The single pore water sample collected on March 31, 2004 contributed to the original listing during the 2010 listing cycle. This decision does not include pore water samples in the exceedance count. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of one samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 50256, Chlorpyrifos **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80149
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos. Two samples are not included in this sample count because the laboratory's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CAU-Carpenteria Creek at Highway 192, 315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50256, Chlorpyrifos — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80144
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [Carpinteria Creek at 8th Street foot bridge - 315CRPxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 50256, Chlorpyrifos — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80151
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50256, Chlorpyrifos **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80152
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos. Two samples are not included in this

	sample count because the laboratory's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CAU-Carpenteria Creek at Highway 192, 315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50256, Chlorpyrifos **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80146
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50256, Chlorpyrifos **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80142
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water

	quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [Carpinteria Creek at 8th Street foot bridge - 315CRPxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 50224 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Five lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 66 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty of the 66 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 50224, Escherichia coli (E. coli) Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80119
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 12 of 38 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50224, Escherichia coli (E. coli) **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80120
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50224, Escherichia coli (E. coli) Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80117
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 8 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50224, Escherichia coli (E. coli) **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80118
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50228** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Eight lines of evidence are available in the administrative record to assess this pollutant. Thirty-five of the 107 samples exceed the water quality objective for water contact recreation (i.e. swimming, wading etc.) but only 5 of the 107 samples also exceeded the water quality objective for non-contact recreation (i.e. boating). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-five of the 107 samples exceed the water quality objective for water contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 50228, Fecal Coliform **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80124
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50228, Fecal Coliform **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80112
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 18 of 62 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50228, Fecal Coliform — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80122
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50228, Fecal Coliform — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80127
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	62
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 4 of 62 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50228, Fecal Coliform **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80126
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of

	2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50228, Fecal Coliform **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80125
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50228, Fecal Coliform **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80121
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50228, Fecal Coliform **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80123
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 16 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50356** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment database. Twenty lines of evidence (LOEs) lines of evidence are available in the administrative record to assess this pollutant. Twenty-nine of 112 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and 13 of the 112 samples also exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen

saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for this pollutant is set at insufficient information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-nine of 112 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80222
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 5 of 62 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80252
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 27 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80251
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80250
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80249
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 18 of 38 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80248
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80247
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling

	(DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80246
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 18 of 38 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80245
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80226
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80241
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 27 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80243
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80228
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 8 of 38 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80230
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80231
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80232
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80233
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 13 of 62 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80234
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80224
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50356, Oxygen, Dissolved **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80236
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 13 of 38 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50348** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Four lines of evidence are available in the administrative record to assess this pollutant. Seventy-three of the 100 samples exceed the water quality objective for agricultural supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-three of the 100 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 50348, Sodium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80237
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50348, Sodium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80238
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 40 of 55 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50348, Sodium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80235
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 33 of 38 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50348, Sodium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80244
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50413 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11798) and total ammonia (Decision 11799). This decision contains all of the LOEs from those decisions in addition to new LOEs. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which zero of the 106 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 107 samples exceed the EPA's Lifetime Health advisory level for total

ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 106 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 107 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80312
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80309
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80105
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-5/18/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80110
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80108
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80116
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80115
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80114
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80113
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-5/18/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80111
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80306
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50413, Ammonia **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80307
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 50364 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 of the Listing Policy. Under section 3.9, data from at least two stations showing an impact to the benthic community and an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the SoCal IBI, however all samples were collected from the same site. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50364, Benthic Community Effects Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80260
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was above 40 and therefore is not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315CAUxxx-Carpinteria Creek at Highway 192
Temporal Representation:	Surveys done on April 8, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50364, Benthic Community Effects **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80262
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	All of the 3 IBI scores in this water body were 39 or lower and therefore are below the impairment threshold of the Southern California IBI.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams.

	Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315CRPxxx-Carpinteria Creek at 8th Street foot bridge
Temporal Representation:	Surveys done on April 26, 2005; April 9, 2008; April 8, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 50315 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 100 samples exceed the water quality objective for boron and protection of the Agricultural Supply beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 100 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50315, Boron Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80209
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50315, Boron **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80211
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50315, Boron **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80207
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50315, Boron **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80204
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 50425 **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Eight lines of evidence are available in the administrative record to assess this pollutant. One of the 102 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 102 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50425, Chlorophyll-a **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80305
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface

	water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50425, Chlorophyll-a **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80321
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50425, Chlorophyll-a **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80318
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50425, Chlorophyll-a **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80316
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50425, Chlorophyll-a **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80317
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50425, Chlorophyll-a **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80103
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50425, Chlorophyll-a **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80320
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50425, Chlorophyll-a **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80319
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50270** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

Six lines of evidence are available in the administrative record to assess this pollutant. One of the 3 samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of 2 pore water samples exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of three samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50270, Diazinon **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80167
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water

	quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [Carpinteria Creek at 8th Street foot bridge - 315CRPxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 50270, Diazinon **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80171
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50270, Diazinon — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80166
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [Carpinteria Creek at 8th Street foot bridge - 315CRPxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 50270, Diazinon — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80173
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CAU-Carpenteria Creek at Highway 192, 315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50270, Diazinon **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80168
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CAU-Carpenteria Creek at Highway 192, 315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50270, Diazinon **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80169
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50706 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 41 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 41 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50706, Nitrogen, Nitrite Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80092
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50706, Nitrogen, Nitrite **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80085
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 50390 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 112 samples exceed the water quality objective for Agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 112 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50390, Specific Conductivity Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80283
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50390, Specific Conductivity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80281
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to

	determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50390, Specific Conductivity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80279
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50390, Specific Conductivity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80285
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50390, Specific Conductivity — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80286
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50321 — Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 112 samples exceed the evaluation guideline (Moyle 1976) used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 112 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50321, Temperature, water **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80214
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50321, Temperature, water **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80215
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50321, Temperature, water — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80216
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50321, Temperature, water — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80217
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50321, Temperature, water **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80213
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 50269 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Ten lines of evidence are available in the administrative record to assess this pollutant. Seven of the 100 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984) and 6 of the 100 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 100 samples exceed the cold freshwater habitat evaluation guideline and 6 of the 100 samples exceed the warm freshwater habitat evaluation guideline. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50269, Turbidity Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80176

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50269, Turbidity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80153
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50269, Turbidity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80154
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50269, Turbidity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80156
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 2 of 37 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50269, Turbidity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80162
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50269, Turbidity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80164
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 37 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50269, Turbidity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80165
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50269, Turbidity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80163
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50269, Turbidity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80159
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50269, Turbidity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80178
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50412 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Thirty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Three of the 112 samples exceed the water quality objective for Agricultural supply, 7 of the 112 samples exceeded the water quality objectives for Drinking Water and Recreation and 1 of the 112 samples exceed the water quality objective for Cold Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 112 samples exceed the water quality objective for Agricultural supply, 7 of the 112 samples exceeded the water quality objectives for Drinking Water and Recreation and 1 of the 112 samples exceed the water quality objective for Cold Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50412, pH — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80255
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80254
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80253
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [

	315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80278
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80277
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80276
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80275
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80274
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80273
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 62

	samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80272
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80271
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80270
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80269
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]

Temporal Representation: Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID: 80297

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 5

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]

Temporal Representation: Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80296
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80295
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80264
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80263
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80261
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80259
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80258
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80257
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80256
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80311
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80308
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80300
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80299
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is

	greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80298
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80314
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50412, pH **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80315
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50294** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Chloride**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Four lines of evidence are available in the administrative record to assess this pollutant. Thirty of the 100 samples exceed the water quality objective for the Agricultural Supply beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty of the 100 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50294, Chloride **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80190
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 9 of 55 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50294, Chloride **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80189
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 21 of 38 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50294, Chloride **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80188
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50294, Chloride **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80187
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride

	exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50325** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Zero of the 107 nitrate samples and zero of the 41 nitrate/nitrite samples exceed the water quality objective for the Agricultural Supply beneficial use. Five of the 107 nitrate samples and one of the 41 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. These uses are fully supported. However, 30 of the 41 nitrate samples and 31 of the 41 nitrate/nitrite samples exceed the Central Coast Region evaluation guideline (R3 NNE Technical Report, 2010) for Cold and Warm Freshwater Habitats. In addition, the following supporting evidence of eutrophication is provided: 1) This water body is on the 303(d) list for low dissolved oxygen. Dissolved oxygen for this water body ranged from 2.99 mg/L to 16.74 mg/L, exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Visual observations of floating algal mats ranged from 0 to 95% cover, often exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3) Water column chlorophyll a concentration averaged 10.21 and peaked at 40.90 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty of the 41 nitrate samples and 31 of the 41 nitrate/nitrite samples exceed the Central Coast Region evaluation guideline for Cold and Warm Freshwater Habitats and this exceeds the allowable

	frequency listed in Table 3.1 of the Listing Policy. In addition, there is supporting evidence of eutrophic conditions in this water segment. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80099
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 30 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80100
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80101
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 29 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80102
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80098
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80097
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80096
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80095
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 29 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80094
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to

	determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80093
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 30 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80091
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80089
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80088
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80087
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80086
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80082
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80221
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80219
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]

Temporal Representation: Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID: 80202

Pollutant: Nitrate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 62

Number of Exceedances: 5

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 5 of 62 samples exceed the criterion for Nitrate as N.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference: Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A
Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]

Temporal Representation: Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50325, Nitrate **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80200
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50262** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Ten lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Four LOEs summarizes sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in sediment samples. Two of the two sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. Six LOEs summarize water samples. Three water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in water samples. One of the five water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of two sediment samples exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80201
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315CRP - Carpinteria Creek at the 8th St. foot bridge.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80218
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80137
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Although both of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count when compared to the control, these samplesÂ's conductivity was greater than 1500 uS/cm, the threshold at which a high salinity control sample should be used to calculate the test statistics. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects, these samples are not counted as exceedances.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

	control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315CRP - Carpinteria Creek at 8th street foot bridge.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80138
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CRP-Carpinteria Creek down stream Carpenteria Ave, 315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring

	includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80198
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315CRP - Carpinteria Creek at the 8th St. foot bridge.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80158
Pollutant:	Invertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CRP-Carpinteria Creek down stream Carpenteria Ave, 315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80220
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80136
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Although both of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count when compared to the control, these samplesÂ's conductivity was greater than 1500 uS/cm, the

threshold at which a high salinity control sample should be used to calculate the test statistics. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects, these samples are not counted as exceedances.

Data Reference: Coastal Confluences 2008 2009

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.

Guideline Reference: Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation: The samples were collected at station 315CRP - Carpinteria Creek at 8th street foot bridge.

Temporal Representation: The samples were collected in August 2008 and January 2009.

Environmental Conditions:

QAPP Information: The SWAMP QAPP (2002) was followed.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID: 80134

Pollutant: Vertebrate Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 3

Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference: Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CRP-Carpinteria Creek down stream Carpenteria Ave, 315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50262, Toxicity **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80135
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CRP-Carpinteria Creek down stream Carpenteria Ave, 315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50333	Region 3
Carpinteria Creek (below Gobernador Creek)		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50333, Anthracene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80229
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50333, Anthracene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80225
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50333, Anthracene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80227
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50333, Anthracene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80223
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50252	Region 3
Carpinteria Creek (below Gobernador Creek)		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50252, Arsenic	**Region 3**
Carpinteria Creek (below Gobernador Creek)	

LOE ID:	80145
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50252, Arsenic **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80143
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50252, Arsenic **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80141
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50252, Arsenic **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80148
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50290** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed.

Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50290, Benzo(a)anthracene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80183
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50290, Benzo(a)anthracene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80185
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50290, Benzo(a)anthracene — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80186
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50290, Benzo(a)anthracene — Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80184
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50279 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50279, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80170
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50279, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80175
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50279, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80172
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50279, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80174
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50244	Region 3
Carpinteria Creek (below Gobernador Creek)		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50244, Cadmium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80132
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50244, Cadmium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80133
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50244, Cadmium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80139
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50244, Cadmium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80140
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50235	Region 3
Carpinteria Creek (below Gobernador Creek)		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name was changed from Chromium (total) to Chromium. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50235, Chromium	**Region 3**
Carpinteria Creek (below Gobernador Creek)	

LOE ID:	80129
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50235, Chromium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80131
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50235, Chromium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80130
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50235, Chromium **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80128
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50414** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was

created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base.

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50414, Chrysene (C1-C4) **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80310
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50414, Chrysene (C1-C4) Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80313
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50414, Chrysene (C1-C4) Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80109
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50414, Chrysene (C1-C4) **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80106
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50398 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50398, Copper **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80294
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50398, Copper **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80291
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50398, Copper **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80293
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50398, Copper Carpinteria Creek (below Gobernador Creek) **Region 3**

LOE ID:	80292
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50394 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50394, Dieldrin Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80290

Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50394, Dieldrin **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80287
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50394, Dieldrin **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80288
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [

	315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50394, Dieldrin **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80289
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50316** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant: **Endrin**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. .
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50316, Endrin **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80212
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0

	of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50316, Endrin **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80205
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50316, Endrin **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80208
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50316, Endrin **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80210

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50298 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in

2014 and this process changed the date associated with the LOE in the assessment data base.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50298, Fluoranthene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80192
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50298, Fluoranthene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80191
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50298, Fluoranthene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80193

Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50298, Fluoranthene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80194
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50285 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50285, Fluorene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80179
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50285, Fluorene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80177

Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50285, Fluorene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80181
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50285, Fluorene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80180
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [

	315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50211 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50211, Lead Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80104

Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50211, Lead **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80268
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50211, Lead **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80266
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [

	315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50211, Lead **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80107
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50408** **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant: **Mercury**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50408, Mercury **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80301
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50408, Mercury **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80304
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]

Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50408, Mercury **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80303
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50408, Mercury **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80302
Pollutant:	Mercury

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50265 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50265, Naphthalene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80161
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]

Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50265, Naphthalene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80160
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50265, Naphthalene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80155
Pollutant:	Naphthalene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50265, Naphthalene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80157
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50388 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the

	Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50388, Nickel **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80267
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50388, Nickel **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80280
Pollutant:	Nickel

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50388, Nickel **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80282
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50388, Nickel **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80284
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50310 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50310, Phenanthrene Region 3

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80147
Pollutant:	Phenanthrene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50310, Phenanthrene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80150
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50310, Phenanthrene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80206
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50310, Phenanthrene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80203
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50303 **Region 3**

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50303, Pyrene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80199
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50303, Pyrene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80196
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50303, Pyrene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80195
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50303, Pyrene **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80197
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50346 Region 3

Carpinteria Creek (below Gobernador Creek)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note, The 'Listing Year' associated with every LOE is 2014, regardless of the year the LOE was created. This is because the old LOEs (pre 2014) were moved to this newly mapped water segment in 2014 and this process changed the date associated with the LOE in the assessment data base. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2

samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50346, Zinc **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80240
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50346, Zinc **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80239
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50346, Zinc **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80242
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50346, Zinc **Region 3**

Carpinteria Creek (below Gobernador Creek)

LOE ID:	80265
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Oceano Dunes**
Water Body ID: **CAC310320101020120430125259**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **47144** **Region 3**
Pacific Ocean at Oceano Dunes

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of 98 samples exceeded the single sample maximum for enterococcus (LOE 56183) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 98 samples exceeded the single sample maximum for enterococcus (LOE 56183) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47144, Enterococcus **Region 3**
Pacific Ocean at Oceano Dunes

LOE ID: 56183

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	98
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Oceano Dunes to determine beneficial use support and results are as follows: 1 of 98 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Oceano Dunes was collected at 1 monitoring site [OCB10]
Temporal Representation:	Data was collected over the time period 2/13/2008-1/4/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 47145 Region 3

Pacific Ocean at Oceano Dunes

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of 97 samples exceeded the single sample maximum for fecal coliform (LOE 56184) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 97 samples exceeded the single sample maximum for fecal coliform (LOE 56184) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47145, Fecal Coliform **Region 3**

Pacific Ocean at Oceano Dunes

LOE ID:	56184
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	97
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Oceano Dunes and results are as follows: 0 of 97 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Oceano Dunes was collected at 1 monitoring site [OCB10]
Temporal Representation:	Data was collected over the time period 2/13/2008-1/4/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 47146 **Region 3**

Pacific Ocean at Oceano Dunes

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of 97 samples exceeded the single sample maximum for total coliform (LOE 56185) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 97 samples exceeded the single sample maximum for total coliform (LOE 56185) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47146, Total Coliform **Region 3**

Pacific Ocean at Oceano Dunes

LOE ID:	56185
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	97
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Oceano Dunes to determine beneficial use support and results are as follows: 0 of 97 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Oceano Dunes was collected at 1 monitoring site [OCB10]
Temporal Representation:	Data was collected over the time period 2/13/2008-1/4/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Mission Creek Lagoon (Santa Barbara County)**
Water Body ID: **CAT315320122012041210424 9**
Water Body Type: **Wetland, Tidal**

DECISION ID **48498** **Region 3**
Mission Creek Lagoon (Santa Barbara County)

Pollutant: **Toxicity**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy.

One line of evidence is available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Zero of the three samples exceed the water quality objective for aquatic life protection because they did not result in a significant toxic effect to the test organisms.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48498, Toxicity **Region 3**
Mission Creek Lagoon (Santa Barbara County)

LOE ID: 55184

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate toxicity. None of the three samples exhibited significant toxicity. The toxicity tests for the samples included survival of Euhaustoriaus and Mytilus.
Data Reference:	Data for toxicity in Mission Creek (Santa Barbara County), Mar 2007-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at site MC Lagoon.
Temporal Representation:	The samples were collected from May 2007 to October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Preliminary Desisgn for the Mission Creek Lagoon and Laguna Channel Restoration Project, City of Santa Barbara 2011. There is no QAPP or QA documentation for this data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Rattlesnake Creek (Santa Barbara County), unnamed tributary at Las Canoas Road**
Water Body ID: **CAR315320111201204051354 55**
Water Body Type: **River & Stream**

DECISION ID **49264** **Region 3**

Rattlesnake Creek (Santa Barbara County), unnamed tributary at Las Canoas Road

Pollutant: **Toxicity**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for protection of aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49264, Toxicity **Region 3**

Rattlesnake Creek (Santa Barbara County), unnamed tributary at Las Canoas Road

LOE ID: 57027

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of Fathead Minnow.
Data Reference:	Data for toxicity in Mission Creek (Santa Barbara County), Mar 2007-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at site Rattlesnak.
Temporal Representation:	The sample was collected in May 2007.
Environmental Conditions:	
QAPP Information:	The data was collected for the Preliminary Desisgn for the Mission Creek Lagoon and Laguna Channel Restoration Project, City of Santa Barbara 2011. There is no QAPP or QA documentation for this data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Old Mission Creek (Santa Barbara County)**
Water Body ID: **CAR3153201120120405113252**
Water Body Type: **River & Stream**

DECISION ID **48722** **Region 3**
Old Mission Creek (Santa Barbara County)

Pollutant: **Toxicity**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not result in a significant toxic effect to one or more test organisms and therefore did not exceed the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not result in a significant toxic effect to one or more test organisms and therefore did not exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48722, Toxicity **Region 3**
Old Mission Creek (Santa Barbara County)

LOE ID: 55627

Pollutant: Toxicity
LOE Subgroup: Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of Fathead Minnow.
Data Reference:	Data for toxicity in Mission Creek (Santa Barbara County), Mar 2007-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at site OMC W Anap.
Temporal Representation:	The sample was collected in May 2007.
Environmental Conditions:	
QAPP Information:	The data was collected for the Preliminary Desisgn for the Mission Creek Lagoon and Laguna Channel Restoration Project, City of Santa Barbara 2011. There is no QAPP or QA documentation for this data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Unnamed tributary to Orcutt Creek**
Water Body ID: **CAR3121003020110510134758**
Water Body Type: **River & Stream**

DECISION ID **51721** **Region 3**
Unnamed tributary to Orcutt Creek

Pollutant: **Azinphos-methyl (Guthion)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single water sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51721, Azinphos-methyl (Guthion) **Region 3**
Unnamed tributary to Orcutt Creek

LOE ID: 58793

Pollutant: Azinphos-methyl (Guthion)
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51721, Azinphos-methyl (Guthion) **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58798
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51681 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither the single water sample, nor the single sediment sample exceeded the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water and single sediment samples did not exceed the evaluation guideline and therefore do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51681, Bifenthrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58801
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51681, Bifenthrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58808
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51681, Bifenthrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58800
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51681, Bifenthrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58799
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51802	Region 3
Unnamed tributary to Orcutt Creek		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51802, Chlordane	**Region 3**
Unnamed tributary to Orcutt Creek	

LOE ID:	58809
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51802, Chlordane **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58810
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53252 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53252, Chlorophyll-a Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	48824
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53252, Chlorophyll-a **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48825
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 51682 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither the single water sample, nor the single sediment sample exceeded the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single water and single sediment samples did not exceed the evaluation guideline and therefore do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51682, Cyfluthrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58833
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51682, Cyfluthrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58834
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51682, Cyfluthrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58673
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51682, Cyfluthrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58835
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51683 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample exceeded the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection, whereas the single sediment sample did not exceed the evaluation guideline for aquatic life protection. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample exceeded the evaluation guidelines for aquatic life uses whereas the single sediment sample did not. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51683, Cyhalothrin, Lambda **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58688
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51683, Cyhalothrin, Lambda **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58676
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51683, Cyhalothrin, Lambda **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58675
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51683, Cyhalothrin, Lambda **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58674
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]

Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51684 **Region 3**

Unnamed tributary to Orcutt Creek

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample exceeded the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection, whereas the single sediment sample did not exceed the evaluation guideline for aquatic life protection. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample exceeded the evaluation guidelines for aquatic life uses whereas the single sediment sample did not. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51684, Cypermethrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58690
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51684, Cypermethrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58689
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51684, Cypermethrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58701
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51684, Cypermethrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58691
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **53492** **Region 3**

Unnamed tributary to Orcutt Creek

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the

Conclusion:	Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53492, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58703
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53492, DDD (Dichlorodiphenyldichloroethane) Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58702
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53494 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53494, DDE (Dichlorodiphenyldichloroethylene) — Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58715
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53494, DDE (Dichlorodiphenyldichloroethylene) Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58704
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53491 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceeded the evaluation guidelines for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53491, DDT (Dichlorodiphenyltrichloroethane) Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58716
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53491, DDT (Dichlorodiphenyltrichloroethane) Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58717
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53491, DDT (Dichlorodiphenyltrichloroethane) Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58744
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53491, DDT (Dichlorodiphenyltrichloroethane) Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58745
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51685 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither the single water sample, nor the single sediment sample exceeded the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water and single sediment samples did not exceed the evaluation guideline and therefore do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51685, Deltamethrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58727
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51685, Deltamethrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58728
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51685, Deltamethrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58729
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51685, Deltamethrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58718
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51844 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single water sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51844, Demeton **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58740
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51844, Demeton **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58730
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51849 **Region 3**

Unnamed tributary to Orcutt Creek

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample

size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single water sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51849, Dichlorvos **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58769
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2

	ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51849, Dichlorvos **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58770
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51852 **Region 3**

Unnamed tributary to Orcutt Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51852, Dieldrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58771
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51852, Dieldrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58772
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51858 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. The single water sample did not exceed the evaluation guideline applied to protect for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed either of the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51858, Dimethoate Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58780
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51858, Dimethoate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58779
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51858, Dimethoate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58781
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51874 **Region 3**

Unnamed tributary to Orcutt Creek

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline applied to protect for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51874, Disulfoton **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58786
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51882 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51882, Endrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58788
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51882, Endrin **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58787
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51686 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Six lines of evidence are available in the administrative record to assess this pollutant. Neither the single water sample (representing both Esfenvalerate - LOEs 58797 & 58802, and Fenvalerate - LOEs 58795 & 58796) nor the single sediment sample exceeded the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported

and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single water and single sediment samples did not exceed the evaluation guideline and therefore do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51686, Esfenvalerate/Fenvalerate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58789
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1

	monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51686, Esfenvalerate/Fenvalerate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58796
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51686, Esfenvalerate/Fenvalerate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58794
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51686, Esfenvalerate/Fenvalerate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58797
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51686, Esfenvalerate/Fenvalerate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58802
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51686, Esfenvalerate/Fenvalerate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58795
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51897 **Region 3**

Unnamed tributary to Orcutt Creek

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial

uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single water sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51897, Ethoprop **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58804
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in

	a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51897, Ethoprop **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58803
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51998	Region 3
Unnamed tributary to Orcutt Creek		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51998, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	**Region 3**
Unnamed tributary to Orcutt Creek	

LOE ID:	58812
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51998, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58805
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52012 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. The single water sample did not exceed the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52012, Malathion Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58813
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52012, Malathion **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58814
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52012, Malathion **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58815
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52046 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. The single water sample did not exceed the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52046, Methidathion Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58822
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52046, Methidathion **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58821
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52046, Methidathion **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58823
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]

Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52062 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. The single water sample did not exceed the evaluation guideline for the municipal beneficial use. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52062, Methyl Parathion Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58832
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52062, Methyl Parathion **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58831
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52062, Methyl Parathion **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58830
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52062, Methyl Parathion **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58824
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52062, Methyl Parathion **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58829
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51238 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 12 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 12 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at

Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 12 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 12 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51238, Oxygen, Dissolved **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48833
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51238, Oxygen, Dissolved **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48834
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51238, Oxygen, Dissolved **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48835
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to

	determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51238, Oxygen, Dissolved **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48832
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 52099 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52099, PCBs (Polychlorinated biphenyls) Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58692
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52099, PCBs (Polychlorinated biphenyls) Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58681
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52093 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52093, Parathion Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58680

Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51687 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence are necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Two LOEs summarize water samples. The single water sample did not exceed the evaluation guideline for aquatic life protection (note LOEs 58695 and 58705 states that zero of zero samples exceed. This is because the single sample was reported as 'non-detect' and the laboratories reporting limit is above the

evaluation guideline so it cannot be determined if there was an exceedance). Two LOEs summarize Permethrin sediment samples. The single sediment sample did not exceed the evaluation guideline used to protect aquatic life beneficial uses. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single water sample and single sediment sample did not exceed the evaluation guidelines for aquatic life uses, therefore do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51687, Permethrin, total **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58695
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average

	concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51687, Permethrin, total **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58705
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51687, Permethrin, total — Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58693
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51687, Permethrin, total — Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	58694
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52155 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. The single water sample did not exceed the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single water sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52155, Phorate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58719
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52155, Phorate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58721

Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52155, Phorate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58720
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52279 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. The single water sample did not exceed the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52279, Phosmet **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58722
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52279, Phosmet **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58732
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52279, Phosmet **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58731
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53256 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the 12 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53256, Temperature, water Region 3

Unnamed tributary to Orcutt Creek

LOE ID:	48843
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 53262 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 12 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53262, pH **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48836
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53262, pH **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48838
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53262, pH **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48839
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53262, pH **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48840
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53262, pH **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48837
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 53014 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 12 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 12 of the 12 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 12 samples exceed the evaluation guideline for Cold Freshwater Habitat and 12 of the 12 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53014, Turbidity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48842
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53014, Turbidity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48841

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 53251 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Grazing-Related Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which two of the eleven samples exceed the water quality

objective for unionized ammonia set to protect aquatic life and these uses are not being supported in this water segment. One LOE summarizes total ammonia data and zero of the twelve samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination to the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the eleven samples exceed the water quality objective for unionized ammonia set to protect aquatic life and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4.. The Santa Maria River Watershed Nutrients TMDL was approved by USEPA on March 8, 2016.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 53251, Ammonia **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48822
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53251, Ammonia **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48821
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53251, Ammonia **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48823
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 48906 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in

sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Seven lines of evidence are available in the administrative record to assess this pollutant. Five of five water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Zero of the six samples exceed the USEPA drinking water health advisory. The single sediment sample exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007). The single sediment sample (pore water) exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. For the municipal and domestic supply beneficial use and the sediment sample, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of five water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48906, Chlorpyrifos **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58828
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48906, Chlorpyrifos **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58827
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48906, Chlorpyrifos **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58826
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48906, Chlorpyrifos **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58825
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Chlorpyrifos. One additional sample (quantified as detected but not quantified) was not used in this assessment because the laboratory data reporting limit is above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48906, Chlorpyrifos **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58820
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Chlorpyrifos. One additional sample (quantified as detected but not quantified) was not used in this assessment because the laboratory data reporting limit is above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48906, Chlorpyrifos **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58819
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48906, Chlorpyrifos **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58818
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1

	monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47357 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Seven lines of evidence are available in the administrative record to assess this pollutant. Two of six samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Two of the six samples exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of six samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and two of six samples exceed the USEPA drinking water health advisory. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision

After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 47357, Diazinon **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58742
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47357, Diazinon **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58758
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47357, Diazinon **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58757
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47357, Diazinon **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58756
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]

Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47357, Diazinon **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58755
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47357, Diazinon **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58743
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47357, Diazinon **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58741
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Solomon Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Solomon Creek (Santa Barbara County) was collected at 1 monitoring site [Solomon Ck. at Sand Plant - 312SOL]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53254 Region 3

Unnamed tributary to Orcutt Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Grazing-Related Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. All three nitrate samples and all 12 nitrate/nitrite samples exceed the water quality objective for Municipal and Domestic Supply (i.e. drinking water) and these samples also exceed the evaluation guideline for aquatic life uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination to the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All three nitrate samples and all 12 nitrate/nitrite samples exceed the water quality objective for Municipal and Domestic Supply and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4.. The Santa Maria River Watershed Nutrients TMDL was approved by USEPA on March 8, 2016. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the

standard.

Line of Evidence (LOE) for Decision ID 53254, Nitrate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48829
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53254, Nitrate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48830
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53254, Nitrate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48828
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53254, Nitrate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48831
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region

	IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53254, Nitrate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48826
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53254, Nitrate **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	48827
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Solomon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Solomon Creek was collected at 1 monitoring site [312ORN - - Solomon Ck. at Sand Plant. Trib to Orcutt Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **53490** **Region 3**

Unnamed tributary to Orcutt Creek

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by	08/31/2015

USEPA:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Four LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Two of the two sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Four LOEs summarize water samples. Nine water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Eight of the nine water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the two sediment samples and eight of the nine water samples exceed the water quality objective and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. 4. The Santa Maria River Watershed Toxicity and Pesticide TMDL was approved by USEPA. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 53490, Toxicity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	80360
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited

	significant toxicity. The toxicity tests included survival and growth of Hyalella azteca (6/10/2009).
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Solomon Creek (Santa Barbara County)station 312SOL.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53490, Toxicity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58747
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. Six of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in all six samples.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Solomon Ck. at Sand Plant.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.

Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53490, Toxicity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58760
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 312ORN Unamed Tributary @ to Orcutt Creek.
Temporal Representation:	The samples were collected in 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. No QAPP provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53490, Toxicity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	80361
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 312ORN Unamed Tributary @ to Orcutt Creek.
Temporal Representation:	The samples were collected in 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. No QAPP provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53490, Toxicity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	58759
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca (6/10/2009).
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected at Solomon Creek (Santa Barbara County)station 312SOL.
Temporal Representation: The samples were collected in June of 2009.
Environmental Conditions:
QAPP Information: The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53490, Toxicity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID: 58761

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference: Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:

Spatial Representation: The sample was collected at station 312ORN Unamed Tributary @ to Orcutt Creek.
Temporal Representation: The sample was collected on 4/23/2008.
Environmental Conditions:
QAPP Information: The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53490, Toxicity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID: 80362

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The sample was collected at station 312ORN Unamed Tributary @ to Orcutt Creek.
Temporal Representation:	The sample was collected on 4/23/2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53490, Toxicity **Region 3**

Unnamed tributary to Orcutt Creek

LOE ID:	80363
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. Six of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in all six samples.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared

	to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Solomon Ck. at Sand Plant.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Los Osos Creek (upstream of Los Osos)**
Water Body ID: **CAR3102301120110722125030**
Water Body Type: **River & Stream**

DECISION ID **47325** **Region 3**
Los Osos Creek (upstream of Los Osos)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 19 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 19 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47325, Escherichia coli (E. coli) **Region 3**
Los Osos Creek (upstream of Los Osos)

LOE ID: 47947

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Escherichia coli.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/5/2008 8:05:00 AM-2/11/2010 10:50:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 47327 Region 3

Los Osos Creek (upstream of Los Osos)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 18 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. Two of the 18 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. There is insufficient evidence that the Cold or Warm Freshwater Habitat beneficial uses are impaired. The following is a summary of the supporting evidence: 1) Dissolved oxygen for this water body ranged from 3.4 mg/L to 11.35 mg/L, twice exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 18 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Without supporting evidence, these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47327, Nitrate **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47948
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47327, Nitrate **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47949
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47327, Nitrate **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47960
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.

Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47327, Nitrate **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47961
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 47329 Region 3

Los Osos Creek (upstream of Los Osos)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 17 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 17 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47329, Specific Conductivity Region 3

Los Osos Creek (upstream of Los Osos)

LOE ID:	47946
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 47330 Region 3

Los Osos Creek (upstream of Los Osos)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 17 samples exceed the water quality objective for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 17 samples exceed the water quality objective and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47330, Temperature, water **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47994
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID 47331 **Region 3**

Los Osos Creek (upstream of Los Osos)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 17 samples exceed the water quality objectives for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 17 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47331, Turbidity **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47993
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47331, Turbidity **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47992
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 47332 **Region 3**

Los Osos Creek (upstream of Los Osos)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 18 samples exceed the water quality objective for Agriculture, three of the 18 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and zero of the 18 samples exceed the water quality objectives for Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 18 samples exceed the water quality objective for Agriculture, three of the 18 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and zero of the 18 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47332, pH **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47980
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47332, pH **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47977
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 3 of 18 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47332, pH **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47976
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47332, pH **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47991
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 3 of 18 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47332, pH **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47979
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47332, pH **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47978
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID 47326 Region 3

Los Osos Creek (upstream of Los Osos)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Seven of the 17 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats but zero of the 17 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The sample size for Warm Freshwater Habitat is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â"for waters not mentioned by a specific beneficial useÂ…Â" and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 17 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47326, Oxygen, Dissolved **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47975
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 13 of 17 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47326, Oxygen, Dissolved **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47964
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47326, Oxygen, Dissolved **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47962
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 7 of 17 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47326, Oxygen, Dissolved **Region 3**

Los Osos Creek (upstream of Los Osos)

LOE ID:	47965
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Los Osos Creek (upstream of Los Osos) to determine beneficial use support and results are as follows: 13 of 17 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek (upstream of Los Osos) was collected at 1 monitoring site [310CLV - Clark Valley Road, Los Osos Creek]
Temporal Representation:	Data was collected over the time period 3/20/2008 9:30:00 AM-2/11/2010 10:32:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Sandy Creek**
Water Body ID: **CAR3097007020110723223659**
Water Body Type: **River & Stream**

DECISION ID **53207** **Region 3**
Sandy Creek

Pollutant: **Alkalinity as CaCO3**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53207, Alkalinity as CaCO3 **Region 3**
Sandy Creek

LOE ID: 58034

Pollutant: Alkalinity as CaCO3
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53207, Alkalinity as CaCO3 **Region 3**

Sandy Creek

LOE ID:	58033
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy

	Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53203 — Region 3

Sandy Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for aquatic life uses or Municipal and Domestic Supply. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53203, Ammonia — Region 3

Sandy Creek

LOE ID:	58025
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories (USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006)).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53203, Ammonia **Region 3**

Sandy Creek

LOE ID:	58036
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]

Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53203, Ammonia **Region 3**

Sandy Creek

LOE ID:	58035
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52752** **Region 3**

Sandy Creek

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample was below the SoCal IBI score of 40 which indicates poor water quality for this area. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 52752, Benthic Community Effects **Region 3**

Sandy Creek

LOE ID:	58026
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was 39 or lower and therefore below the impairment threshold of the Southern California IBI.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	Surveys done at the following station: 309SDCMCC-Sandy Creek
Temporal Representation:	Survey done on July 14, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols.
QAPP Information Reference(s):	

DECISION ID 53483 **Region 3**

Sandy Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for Municipal and Domestic Supply uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53483, Nitrate **Region 3**

Sandy Creek

LOE ID:	58028
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of

	the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53482 Region 3

Sandy Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for Municipal and Domestic Supply uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53482, Nitrogen, Nitrite Region 3

Sandy Creek

LOE ID:	58029
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51237**	**Region 3**
Sandy Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the water quality objectives for Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the water quality objectives but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51237, Oxygen, Dissolved **Region 3**

Sandy Creek

LOE ID:	58032
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51237, Oxygen, Dissolved **Region 3**

Sandy Creek

LOE ID:	58030
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen,

	Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53212 Region 3

Sandy Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for Cold Freshwater Habitat . This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53212, Temperature, water Region 3

Sandy Creek

LOE ID:	57979
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**53204**	**Region 3**
Sandy Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for recreation and drinking water uses but did exceed the water quality objectives for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objectives for recreation and drinking water uses but did exceed the water quality objectives for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53204, pH **Region 3**

Sandy Creek

LOE ID:	57972
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53204, pH **Region 3**

Sandy Creek

LOE ID:	57973
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53204, pH **Region 3**

Sandy Creek

LOE ID:	57974
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53204, pH **Region 3**

Sandy Creek

LOE ID:	57975
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53204, pH **Region 3**

Sandy Creek

LOE ID:	57976
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Sandy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sandy Creek was collected at 1 monitoring site [Sandy Creek - 907SDFRC2]
Temporal Representation:	Data was collected on a single day 7/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Congress Street Drain**
Water Body ID: **CAR3095004220110828213329**
Water Body Type: **River & Stream**

DECISION ID	47421	Region 3
Congress Street Drain		

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample (pore water) was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample (pore water) was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47421, Chlorpyrifos — Region 3

Congress Street Drain

LOE ID:	54089
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Congress Street Drain was collected at 1 monitoring site [Congress Street Drainage - 309SUP104]
Temporal Representation:	Data was collected on a single day 1/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47421, Chlorpyrifos — Region 3

Congress Street Drain

LOE ID:	54090
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Congress Street Drain was collected at 1 monitoring site [Congress Street Drainage - 309SUP104]
Temporal Representation:	Data was collected on a single day 1/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47153** **Region 3**

Congress Street Drain

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single pore

water sample did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single pore water sample did not exceed the evaluation guideline and pore water results will not be the sole basis for any decision. The single sample does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47153, Diazinon **Region 3**

Congress Street Drain

LOE ID:	54091
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Congress Street Drain to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not

	be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Congress Street Drain was collected at 1 monitoring site [Congress Street Drainage - 309SUP104]
Temporal Representation:	Data was collected on a single day 1/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47153, Diazinon **Region 3**

Congress Street Drain

LOE ID:	54092
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Congress Street Drain to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Congress Street Drain was collected at 1 monitoring site [Congress Street Drainage - 309SUP104]
Temporal Representation:	Data was collected on a single day 1/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47206	Region 3
Congress Street Drain		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for aquatic life protection (did not have a toxic effect to the test organism). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47206, Toxicity	**Region 3**
Congress Street Drain	

LOE ID:	54093
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 309SUP104.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Canyon Del Rey (Monterey County)**
Water Body ID: **CAR3091201320110828205907**
Water Body Type: **River & Stream**

DECISION ID **47060** **Region 3**
Canyon Del Rey (Monterey County)

Pollutant: **Bifenthrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

The single sample did not exceed the evaluation guideline (Amweg and Weston, 2007) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47060, Bifenthrin **Region 3**
Canyon Del Rey (Monterey County)

LOE ID: 53780

Pollutant: Bifenthrin
LOE Subgroup: Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47060, Bifenthrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53779
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.

Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47068 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47068, Chlordane **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53781
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47068, Chlordane **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53782
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47076 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample result was not used in the assessment because it is qualified as a non-detect and

the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified. There is no evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample result was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified. Therefore, the single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47076, Chlorpyrifos **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53784
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47076, Chlorpyrifos **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53783
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier

et al., 2005).

Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47061 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47061, Cyfluthrin Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53785
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47061, Cyfluthrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53786
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47062 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47062, Cyhalothrin, Lambda **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53787
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47062, Cyhalothrin, Lambda **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53788
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47063 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Maund et al., 2002) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a

beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47063, Cypermethrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53789
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1

	monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47063, Cypermethrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53790
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47069 **Region 3**

Canyon Del Rey (Monterey County)

Pollutant: **DDD (Dichlorodiphenyldichloroethane)**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47069, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53791
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47069, DDD (Dichlorodiphenyldichloroethane) Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53792
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47070 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47070, DDE (Dichlorodiphenyldichloroethylene) Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53793
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47070, DDE (Dichlorodiphenyldichloroethylene) Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53794
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47071 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47071, DDT (Dichlorodiphenyltrichloroethane) Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53828
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47071, DDT (Dichlorodiphenyltrichloroethane) Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53795
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47071, DDT (Dichlorodiphenyltrichloroethane) Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53829
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47071, DDT (Dichlorodiphenyltrichloroethane) Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53796
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47064	Region 3
Canyon Del Rey (Monterey County)		

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47064, Deltamethrin	**Region 3**
Canyon Del Rey (Monterey County)	

LOE ID:	53798
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.

Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47064, Deltamethrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53797
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79

	ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47077 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample of pore water did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline (Finlayson, 2004)and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47077, Diazinon — Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53800
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47077, Diazinon — Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53799
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47072** **Region 3**

Canyon Del Rey (Monterey County)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47072, Dieldrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53802
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47072, Dieldrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53801
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47073 **Region 3**

Canyon Del Rey (Monterey County)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47073, Endrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53803
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47073, Endrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53804
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47065	Region 3
Canyon Del Rey (Monterey County)		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47065, Esfenvalerate/Fenvalerate	**Region 3**
Canyon Del Rey (Monterey County)	

LOE ID:	53805
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.

Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47065, Esfenvalerate/Fenvalerate **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53809
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration

	(LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47066 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Ding et al., 2011) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47066, Fenpropathrin Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53811
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47066, Fenpropathrin **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53810
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47078 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Maul et al., 2008) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47078, Fipronil **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53817
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47078, Fipronil **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53812
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47079 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for

pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

The single sample did not exceed the evaluation guideline (Maul et al., 2008) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47079, Fipronil Sulfide **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53819
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16

	ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47079, Fipronil Sulfide **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53818
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	47080	Region 3
Canyon Del Rey (Monterey County)		

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Maul et al., 2008) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47080, Fipronil Sulfone	**Region 3**
Canyon Del Rey (Monterey County)	

LOE ID:	53820
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-

	detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47080, Fipronil Sulfone **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53823
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47074 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47074, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53825
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47074, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 3

Canyon Del Rey (Monterey County)

LOE ID:	53824
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47067 Region 3

Canyon Del Rey (Monterey County)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47067, Permethrin, total **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53826
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47067, Permethrin, total **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53827
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Canyon Del Rey (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Canyon Del Rey (Monterey County) was collected at 1 monitoring site [Del Rey Oaks Drainage - 309SUP106]
Temporal Representation:	Data was collected on a single day 2/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47081 **Region 3**

Canyon Del Rey (Monterey County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6

Conclusion:	of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. The single sample did exceed the water quality objective. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the water quality objective but, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47081, Toxicity **Region 3**

Canyon Del Rey (Monterey County)

LOE ID:	53830
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are

	counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 309SUP106.
Temporal Representation:	The sample was collected in February 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Llagas Creek, unnamed drain 3 to creek at treatment ponds (near Bloomfield Ave)**
Water Body ID: **CAR3053002020110627145659**
Water Body Type: **River & Stream**

DECISION ID **47870** **Region 3**

Llagas Creek, unnamed drain 3 to creek at treatment ponds (near Bloomfield Ave)

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective set to protect aquatic life uses.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47870, Oxygen, Dissolved **Region 3**

Llagas Creek, unnamed drain 3 to creek at treatment ponds (near Bloomfield Ave)

LOE ID: 54735

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 1 minimum of Dissolved Oxygen concentrations had no exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SW4 station.
Temporal Representation:	One sample was collected in March 2006.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID 47871 Region 3

Llagas Creek, unnamed drain 3 to creek at treatment ponds (near Bloomfield Ave)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective set to protect aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47871, Temperature, water **Region 3**

Llagas Creek, unnamed drain 3 to creek at treatment ponds (near Bloomfield Ave)

LOE ID:	54737
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample did not exceed the evaluation guideline for temperature in this water body.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Sample was collected at the following site: SW4-A location at the drain at the southeast corner of Pond S9 that drains to Llagas Creek.
Temporal Representation:	Samples was collected on 3/21/2006.
Environmental Conditions:	
QAPP Information:	Monitoring data submitted for the purpose of NPDES permitting. Permit No-R3-2010-0009.
QAPP Information Reference(s):	

DECISION ID 47872 **Region 3**

Llagas Creek, unnamed drain 3 to creek at treatment ponds (near Bloomfield Ave)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective set to protect aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47872, pH **Region 3**

Llagas Creek, unnamed drain 3 to creek at treatment ponds (near Bloomfield Ave)

LOE ID:	54736
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 1 minimum and/or maximum of pH data did not exceed the objective.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sample was collected from the SW4 station.
Temporal Representation:	One sample was collected in March 2006.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Llagas Creek, unnamed drain2 to creek at treatment ponds (near Engle Way)**
Water Body ID: **CAR3053002020110627144031**
Water Body Type: **River & Stream**

DECISION ID **47926** **Region 3**

Llagas Creek, unnamed drain2 to creek at treatment ponds (near Engle Way)

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the 4 samples exceed the water quality objective set to protect aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 4 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47926, Oxygen, Dissolved **Region 3**

Llagas Creek, unnamed drain2 to creek at treatment ponds (near Engle Way)

LOE ID: 54741

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 4 minimum of Dissolved Oxygen concentrations had 1 exceedence.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SW4 station.
Temporal Representation:	One sample was collected approximately semi-annually from March 2006 to March 2008.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID 47928 Region 3

Llagas Creek, unnamed drain2 to creek at treatment ponds (near Engle Way)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the water quality objective set to protect aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47928, Temperature, water **Region 3**

Llagas Creek, unnamed drain2 to creek at treatment ponds (near Engle Way)

LOE ID:	54743
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 4 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected at the following site: SW2: A location at the drain on the north side of South Ponds at culvert prior to entering Llagas creek.
Temporal Representation:	Samples were collected during the months of March and June in 2006-2008.
Environmental Conditions:	
QAPP Information:	Monitoring data submitted for the purpose of NPDES permitting. Permit No-R3-2010-0009.
QAPP Information Reference(s):	

DECISION ID 47929 **Region 3**

Llagas Creek, unnamed drain2 to creek at treatment ponds (near Engle Way)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the water quality objective set to protect aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47929, pH **Region 3**

Llagas Creek, unnamed drain2 to creek at treatment ponds (near Engle Way)

LOE ID:	54742
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 4 minimums and maximums of pH data had no exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from SW2 station.
Temporal Representation:	Samples were collected approximately once a year from March 2006 to March 2008.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Llagas Creek, unnamed drain to creek at treatment ponds (near Southside Drive)**
Water Body ID: **CAR3053002020110627142647**
Water Body Type: **River & Stream**

DECISION ID **47873** **Region 3**

Llagas Creek, unnamed drain to creek at treatment ponds (near Southside Drive)

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the 10 samples exceed the water quality objective set to protect aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 10 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47873, Oxygen, Dissolved **Region 3**

Llagas Creek, unnamed drain to creek at treatment ponds (near Southside Drive)

LOE ID: 54738

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 10 minimum of Dissolved Oxygen concentrations had 3 exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SW1 and SW3A stations.
Temporal Representation:	One sample was collected approximately quarterly from march 2006 to March 2008.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID 47874 Region 3

Llagas Creek, unnamed drain to creek at treatment ponds (near Southside Drive)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 10 samples exceed the water quality objective set to protect aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 10 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47874, Temperature, water **Region 3**

Llagas Creek, unnamed drain to creek at treatment ponds (near Southside Drive)

LOE ID:	54740
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 10 samples exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected at two sites in this water body. SW1: A location at the drain on the south side of East Ponds at culvert prior to entering Llagas creek; and SW3A: A location at the farm drainage east of the East Ponds.
Temporal Representation:	Samples were collected during the months of March and June in 2006-2008.
Environmental Conditions:	
QAPP Information:	Monitoring data submitted for the purpose of NPDES permitting. Permit No-R3-2010-0009.
QAPP Information Reference(s):	

DECISION ID 47875 **Region 3**

Llagas Creek, unnamed drain to creek at treatment ponds (near Southside Drive)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 10 samples exceed the water quality objective set to protect aquatic life uses. This sample size is

insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 10 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47875, pH **Region 3**

Llagas Creek, unnamed drain to creek at treatment ponds (near Southside Drive)

LOE ID:	54739
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 10 minimums and maximums of pH data had no exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations SW1 and SW3A.
Temporal Representation:	Samples were collected approximately quarterly from March 2006 to March 2008.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Juan Creek, West Branch (San Benito County)**
Water Body ID: **CAR3052004120110825145410**
Water Body Type: **River & Stream**

DECISION ID **53192** **Region 3**

San Juan Creek, West Branch (San Benito County)

Pollutant: **Chlorophyll-a**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53192, Chlorophyll-a **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID: 49066

Pollutant: Chlorophyll-a
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53192, Chlorophyll-a **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	49053
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek

	West Branch (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 52175 Region 3

San Juan Creek, West Branch (San Benito County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for Cold or Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at

Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52175, Oxygen, Dissolved **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	49069
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52175, Oxygen, Dissolved — Region 3

San Juan Creek, West Branch (San Benito County)

LOE ID:	49068
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52175, Oxygen, Dissolved — Region 3

San Juan Creek, West Branch (San Benito County)

LOE ID:	49067
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52175, Oxygen, Dissolved **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	49070
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 53194 Region 3

San Juan Creek, West Branch (San Benito County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53194, Temperature, water Region 3

San Juan Creek, West Branch (San Benito County)

LOE ID:	48927
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek

	West Branch (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **53195** **Region 3**

San Juan Creek, West Branch (San Benito County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize sediment samples. The single sediment sample resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Two LOEs summarize water samples. One of the three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the water quality objective for aquatic life. One of the three water samples did result in a significant toxic effect to one or more test organisms. However, these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53195, Toxicity **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	80338
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. One of the three samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia. The sample exhibited significant toxicity to Ceriodaphnia dubia reproduction and survival on 9/30/08.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305ACR West branch San Juan Creek.
Temporal Representation:	The samples were collected in 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. A QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53195, Toxicity **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	80339
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella Azteca growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The sample was collected at station 305ACR San Juan Creek.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53195, Toxicity **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	57906
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. One of the three samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia. The sample exhibited significant toxicity to Ceriodaphnia dubia reproduction and survival on 9/30/08.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305ACR West branch San Juan Creek.
Temporal Representation:	The samples were collected in 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. A QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53195, Toxicity **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	57907
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella Azteca growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The sample was collected at station 305ACR San Juan Creek.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	53196	Region 3
San Juan Creek, West Branch (San Benito County)		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guidelines for Cold Freshwater Habitat (Sigler et al. 1984) and Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53196, Turbidity	**Region 3**
San Juan Creek, West Branch (San Benito County)	

LOE ID:	48926
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as

	follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53196, Turbidity **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	48791
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 53197 Region 3

San Juan Creek, West Branch (San Benito County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53197, pH Region 3

San Juan Creek, West Branch (San Benito County)

LOE ID:	48789
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53197, pH **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	48788
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53197, pH **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	48787
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53197, pH **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	48786
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53197, pH **Region 3**

San Juan Creek, West Branch (San Benito County)

LOE ID:	48790
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek West Branch (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek West Branch (San Benito County) was collected at 1 monitoring site [305ACR - San Juan Creek]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean (outside Santa Barbara Harbor)**
Water Body ID: **CAO315320112011040621475 1**
Water Body Type: **Ocean**

DECISION ID **51807** **Region 3**
Pacific Ocean (outside Santa Barbara Harbor)

Pollutant: **Copper**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero out of three water samples exceeded the evaluation guideline applied to protect the marine habitat beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three water samples exceeded the evaluation guideline applied to protect the marine habitat beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51807, Copper **Region 3**
Pacific Ocean (outside Santa Barbara Harbor)

LOE ID: 56019

Pollutant: Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the 6-month median concentration of 3 ug/L for dissolved copper in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 3 ug/L for dissolved copper to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	A total of four grab samples were collected during each sampling event from outside the marina basin (Sites 5, 6, 7, & 8). Sample results were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID 53280 Region 3

Pacific Ocean (outside Santa Barbara Harbor)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for protection of Marine Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53280, Oxygen, Dissolved **Region 3**

Pacific Ocean (outside Santa Barbara Harbor)

LOE ID:	56020
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 12 minimum of Dissolved Oxygen concentrations had 0 exceedences.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	...the following objectives shall also apply to all ocean waters, including Monterey and Carmel Bays: ...nor shall the minimum dissolved oxygen concentration be reducedbelow 5.0 mg/L at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Santa Barbara Harbor 5.1 Santa Barbara Harbor 5.2 Santa Barbara Harbor 5.3 Santa Barbara Harbor 6.1 Santa Barbara Harbor 6.2 Santa Barbara Harbor 6.3 Santa Barbara Harbor 7.1 Santa Barbara Harbor 7.2 Santa Barbara Harbor 7.3 Santa Barbara Harbor 8.1 Santa Barbara Harbor 8.2 Santa Barbara Harbor 8.3
Temporal Representation:	Samples were collected once a month from August 2006 to October 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID 52321 **Region 3**

Pacific Ocean (outside Santa Barbara Harbor)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of three water samples exceeded the evaluation guideline for the marine habitat beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52321, Zinc **Region 3**

Pacific Ocean (outside Santa Barbara Harbor)

LOE ID:	56022
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the 6-month median concentration of 20 ug/L for dissolved zinc in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L for dissolved zinc in saltwater to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	A total of four grab samples were collected during each sampling event from outside the marina basin (Sites 5, 6, 7, & 8). Sample results were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID 53281 Region 3

Pacific Ocean (outside Santa Barbara Harbor)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for protection of Marine Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53281, pH Region 3

Pacific Ocean (outside Santa Barbara Harbor)

LOE ID:	56021
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 12 minimums and maximums had no exceedences.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Santa Barbara Harbor 5.1 Santa Barbara Harbor 5.2* Santa Barbara Harbor 5.3 Santa Barbara Harbor 6.1 Santa Barbara Harbor 6.2* Santa Barbara Harbor 6.3 Santa Barbara Harbor 7.1 Santa Barbara Harbor 7.2* Santa Barbara Harbor 7.3 Santa Barbara Harbor 8.1 Santa Barbara Harbor 8.2* Santa Barbara Harbor 8.3
Temporal Representation:	Samples were collected twice in August 2006 and once in September 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Anacapa Island North Middle Island**
Water Body ID: **CAC315340122011071319390 1**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **49771** **Region 3**
Pacific Ocean at Anacapa Island North Middle Island

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49771, Arsenic **Region 3**
Pacific Ocean at Anacapa Island North Middle Island

LOE ID: 77497

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49774 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49774, Cadmium **Region 3**

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77498
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49775 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49775, Chlordane **Region 3**

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77499
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at:

http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	47878	Region 3
Pacific Ocean at Anacapa Island North Middle Island		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47878, Chlorpyrifos	**Region 3**
Pacific Ocean at Anacapa Island North Middle Island	

LOE ID:	77500
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys

Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49787 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49787, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77501
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49776**	**Region 3**
Pacific Ocean at Anacapa Island North Middle Island		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49776, Dieldrin	**Region 3**
Pacific Ocean at Anacapa Island North Middle Island	

LOE ID:	77502
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49777 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49777, Endosulfan **Region 3**

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77503
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to

	levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49778 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49778, Endrin **Region 3**

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77504
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program

Additional background information can be found at:
http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID 49779 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49779, Heptachlor epoxide Region 3

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77506
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49780 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49780, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77507
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The one result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49781 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49781, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) Region 3

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77505
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49782 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant: Mercury

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49782, Mercury **Region 3**

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77512
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49783 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49783, Mirex **Region 3**

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77508
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	49784	Region 3
Pacific Ocean at Anacapa Island North Middle Island		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49784, PAHs (Polycyclic Aromatic Hydrocarbons)	**Region 3**
Pacific Ocean at Anacapa Island North Middle Island	

LOE ID:	77509
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The one result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49785**	**Region 3**
Pacific Ocean at Anacapa Island North Middle Island		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the

Conclusion:	Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49785, PCBs (Polychlorinated biphenyls) **Region 3**

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77510
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49786 Region 3

Pacific Ocean at Anacapa Island North Middle Island

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49786, Selenium **Region 3**

Pacific Ocean at Anacapa Island North Middle Island

LOE ID:	77511
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Anacapa Island North Middle Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANMI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Point Santa Barbara**
Water Body ID: **CAC315320112011071318415 2**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **50478** **Region 3**
Pacific Ocean at Point Santa Barbara

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50478, Arsenic **Region 3**
Pacific Ocean at Point Santa Barbara

LOE ID: 77480

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50479 Region 3

Pacific Ocean at Point Santa Barbara

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50479, Cadmium **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77481
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment

	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50480	Region 3
Pacific Ocean at Point Santa Barbara		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50480, Chlordane **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77482
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 47886 **Region 3**

Pacific Ocean at Point Santa Barbara

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47886, Chlorpyrifos **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77483
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50481	Region 3
Pacific Ocean at Point Santa Barbara		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50481, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77484
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50482	Region 3
Pacific Ocean at Point Santa Barbara		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50482, Dieldrin	**Region 3**
Pacific Ocean at Point Santa Barbara	

LOE ID:	77485
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water

	Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**50483**	**Region 3**
Pacific Ocean at Point Santa Barbara		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50483, Endrin **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77486
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is

a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	50484	Region 3
Pacific Ocean at Point Santa Barbara		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50484, Hexachlorobenzene/ HCB	**Region 3**
Pacific Ocean at Point Santa Barbara	

LOE ID:	77489
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50757 Region 3

Pacific Ocean at Point Santa Barbara

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50757, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77487
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs,

Selenium, and Toxaphene
Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50485 Region 3

Pacific Ocean at Point Santa Barbara

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50485, Mercury Region 3

Pacific Ocean at Point Santa Barbara

LOE ID:	77490
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50518 **Region 3**

Pacific Ocean at Point Santa Barbara

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50518, Mirex **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77491
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21

	g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50519 Region 3

Pacific Ocean at Point Santa Barbara

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50519, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77492
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50520 **Region 3**

Pacific Ocean at Point Santa Barbara

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50520, PCBs (Polychlorinated biphenyls) **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77493
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50521 Region 3

Pacific Ocean at Point Santa Barbara

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50521, Selenium **Region 3**

Pacific Ocean at Point Santa Barbara

LOE ID:	77494
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Santa Barbara (SBSB).
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at San Miguel Island, Otter Harbor**
Water Body ID: **CAC315100422011071319211 4**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **51789** **Region 3**
Pacific Ocean at San Miguel Island, Otter Harbor

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51789, Arsenic **Region 3**
Pacific Ocean at San Miguel Island, Otter Harbor

LOE ID: 77495

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SMOH.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/19/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 51791 Region 3

Pacific Ocean at San Miguel Island, Otter Harbor

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51791, Cadmium **Region 3**

Pacific Ocean at San Miguel Island, Otter Harbor

LOE ID:	77496
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SMOH.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/19/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Arroyo Hondo Canyon mouth**
Water Body ID: **CAC315100232011071318361 6**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **49952** **Region 3**
Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49952, Arsenic **Region 3**
Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID: 77529

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49953 Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49953, Cadmium **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77530
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49954 Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49954, Chlordane **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77531
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	47880	Region 3
Pacific Ocean at Arroyo Hondo Canyon mouth		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47880, Chlorpyrifos	**Region 3**
Pacific Ocean at Arroyo Hondo Canyon mouth	

LOE ID:	77532
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49973 Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49973, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77533
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)

Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49958 Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49958, Dieldrin **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77534
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49959 **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49959, Endosulfan **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77535
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water

	Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49961**	**Region 3**
Pacific Ocean at Arroyo Hondo Canyon mouth		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49961, Endrin **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77536
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.

Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49962 **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49962, Heptachlor epoxide **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77545
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did not exceed the objective. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49963 Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49963, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77538
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49964	Region 3
Pacific Ocean at Arroyo Hondo Canyon mouth		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49964, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77537
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID 49966 Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49966, Mercury Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77543
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49967 Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49967, Mirex **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77539
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49968 Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49968, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77540
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49970	Region 3
Pacific Ocean at Arroyo Hondo Canyon mouth		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49970, PCBs (Polychlorinated biphenyls)	**Region 3**
Pacific Ocean at Arroyo Hondo Canyon mouth	

LOE ID:	77541
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single

	result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49972 Region 3

Pacific Ocean at Arroyo Hondo Canyon mouth

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49972, Selenium **Region 3**

Pacific Ocean at Arroyo Hondo Canyon mouth

LOE ID:	77542
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Arroyo Hondo Canyon mouth to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from AHCM.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/18/2008
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Monterey Bay at Moss Landing**
Water Body ID: **CAC309110102011071316455 7**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **49212** **Region 3**
Monterey Bay at Moss Landing

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49212, Arsenic **Region 3**
Monterey Bay at Moss Landing

LOE ID: 77546

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single sample did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49214**	**Region 3**
Monterey Bay at Moss Landing		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49214, Cadmium **Region 3**

Monterey Bay at Moss Landing

LOE ID:	77547
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single sample did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49217	Region 3
Monterey Bay at Moss Landing		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49217, Chlordane **Region 3**

Monterey Bay at Moss Landing

LOE ID:	77548
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at:

http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	47520	Region 3
Monterey Bay at Moss Landing		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47520, Chlorpyrifos	**Region 3**
Monterey Bay at Moss Landing	

LOE ID:	77549
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys

Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49219**	**Region 3**
Monterey Bay at Moss Landing		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49219, DDT (Dichlorodiphenyltrichloroethane) Region 3

Monterey Bay at Moss Landing

LOE ID:	77550
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49221	Region 3
Monterey Bay at Moss Landing		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49221, Dieldrin	Region 3
Monterey Bay at Moss Landing	

LOE ID:	77551
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID **49223** **Region 3**

Monterey Bay at Moss Landing

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49223, Endosulfan **Region 3**

Monterey Bay at Moss Landing

LOE ID:	77552
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to

	levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49225	Region 3
Monterey Bay at Moss Landing		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49225, Endrin **Region 3**

Monterey Bay at Moss Landing

LOE ID:	77553
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program

Additional background information can be found at:
http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	49226	Region 3
Monterey Bay at Moss Landing		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49226, Heptachlor epoxide	**Region 3**
Monterey Bay at Moss Landing	

LOE ID:	77555
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49228**	**Region 3**
Monterey Bay at Moss Landing		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49228, Hexachlorobenzene/ HCB **Region 3**

Monterey Bay at Moss Landing

LOE ID:	77556
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49229	Region 3
Monterey Bay at Moss Landing		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49229, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 3

Monterey Bay at Moss Landing

LOE ID:	77554
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49231 Region 3

Monterey Bay at Moss Landing

Pollutant: Mercury

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49231, Mercury **Region 3**

Monterey Bay at Moss Landing

LOE ID:	77557
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49232	Region 3
Monterey Bay at Moss Landing		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of zero tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49232, Mirex **Region 3**

Monterey Bay at Moss Landing

LOE ID:	77558
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program

Additional background information can be found at:
http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	49233	Region 3
Monterey Bay at Moss Landing		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49233, PAHs (Polycyclic Aromatic Hydrocarbons)	**Region 3**
Monterey Bay at Moss Landing	

LOE ID:	77559
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49234**	**Region 3**
Monterey Bay at Moss Landing		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49234, PCBs (Polychlorinated biphenyls) Region 3

Monterey Bay at Moss Landing

LOE ID:	77560
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish

	tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49235	Region 3
Monterey Bay at Moss Landing		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49235, Selenium **Region 3**

Monterey Bay at Moss Landing

LOE ID:	77561
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Moss Landing to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBML.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/5/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Point Lobos at Weston Beach**
Water Body ID: **CAC30800013201107131652 46**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **50445** **Region 3**
Pacific Ocean at Point Lobos at Weston Beach

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50445, Arsenic **Region 3**
Pacific Ocean at Point Lobos at Weston Beach

LOE ID: 77464

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50449	Region 3
Pacific Ocean at Point Lobos at Weston Beach		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50449, Cadmium **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77465
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**50452**	**Region 3**
Pacific Ocean at Point Lobos at Weston Beach		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50452, Chlordane **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77466
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID **47885** **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47885, Chlorpyrifos **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77467
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50453	Region 3
Pacific Ocean at Point Lobos at Weston Beach		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50453, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77468
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50456	Region 3
Pacific Ocean at Point Lobos at Weston Beach		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50456, Dieldrin	**Region 3**
Pacific Ocean at Point Lobos at Weston Beach	

LOE ID:	77469
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)

Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**50459**	**Region 3**
Pacific Ocean at Point Lobos at Weston Beach		

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50459, Endosulfan **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77470
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	

QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50455 **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50455, Endrin **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77471
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50461 Region 3

Pacific Ocean at Point Lobos at Weston Beach

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50461, Heptachlor epoxide **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77473
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50462	Region 3
Pacific Ocean at Point Lobos at Weston Beach		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50462, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77474
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID **50463** **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

Pollutant:	**Hexachlorocyclohexane (HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50463, Hexachlorocyclohexane (HCH) **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77472
Pollutant:	Hexachlorocyclohexane (HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50465	Region 3
Pacific Ocean at Point Lobos at Weston Beach		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50465, Mercury **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77475
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50468 **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50468, Mirex — Region 3

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77476
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**50470**	**Region 3**
Pacific Ocean at Point Lobos at Weston Beach		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50470, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77477
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	

QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 50471 Region 3

Pacific Ocean at Point Lobos at Weston Beach

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50471, PCBs (Polychlorinated biphenyls) Region 3

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77478
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID **50473** **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50473, Selenium **Region 3**

Pacific Ocean at Point Lobos at Weston Beach

LOE ID:	77479
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Point Lobos Weston Beach, PLSR.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Ano Nuevo, Ano Nuevo Island**
Water Body ID: **CAC3042001220110713154150**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **49788** **Region 3**
Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49788, Arsenic **Region 3**
Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID: 77513

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample, this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49789 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49789, Cadmium **Region 3**

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77514
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49790 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49790, Chlordane **Region 3**

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77528
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at:

http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	47879	Region 3
Pacific Ocean at Ano Nuevo, Ano Nuevo Island		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47879, Chlorpyrifos	**Region 3**
Pacific Ocean at Ano Nuevo, Ano Nuevo Island	

LOE ID:	77515
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys

Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49803 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49803, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77516
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49791 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49791, Dieldrin Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77517
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The one sample exceeded the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49792 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49792, Endosulfan **Region 3**

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77518
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to

	levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49793 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49793, Endrin **Region 3**

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77519
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program

Additional background information can be found at:
http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID 49795 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49795, Heptachlor epoxide Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77521
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49796 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49796, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77522
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49797	Region 3
Pacific Ocean at Ano Nuevo, Ano Nuevo Island		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49797, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77520
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005))
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49798 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant: Mercury

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49798, Mercury **Region 3**

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77527
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49799 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49799, Mirex **Region 3**

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77523
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID 49800 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49800, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77524
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49801 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the

Conclusion:	Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49801, PCBs (Polychlorinated biphenyls) **Region 3**

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77525
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49802 Region 3

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49802, Selenium **Region 3**

Pacific Ocean at Ano Nuevo, Ano Nuevo Island

LOE ID:	77526
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Ano Nuevo, Ano Nuevo Island to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site ANAI.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/3/2009.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Bean Hollow State Beach**
Water Body ID: **CAC3042001120110713133056**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **46913** **Region 3**
Pacific Ocean at Bean Hollow State Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 70 samples exceeded the geometric mean standard for enterococcus (LOE 56047) and 0 of 106 samples exceeded the single sample maximum for enterococcus (LOE 56046) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 70 samples exceeded the geometric mean standard for enterococcus (LOE 56047) and 0 of 106 samples exceeded the single sample maximum for enterococcus (LOE 56046) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46913, Enterococcus **Region 3**
Pacific Ocean at Bean Hollow State Beach

LOE ID: 56046

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Bean Hollow State Beach to determine beneficial use support and results are as follows: 0 of 106 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Bean Hollow State Beach was collected at 1 monitoring site [Bean Hollow State Beach]
Temporal Representation:	Data was collected over the time period 1/22/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46913, Enterococcus **Region 3**

Pacific Ocean at Bean Hollow State Beach

LOE ID:	56047
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	70
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 70 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at Bean Hollow State Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam by San Mateo County Environmental Health.
QAPP Information Reference(s):	

DECISION ID 46914 Region 3

Pacific Ocean at Bean Hollow State Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 72 samples exceeded the geometric mean standard for fecal coliform (LOE 56049) and 0 of 107 samples exceeded the single sample maximum for fecal coliform (LOE 56048) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 72 samples exceeded the geometric mean standard for fecal coliform (LOE 56049) and 0 of 107 samples exceeded the single sample maximum for fecal coliform (LOE 56048) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46914, Fecal Coliform Region 3

Pacific Ocean at Bean Hollow State Beach

LOE ID:	56049
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 72 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed 200/100 mL. California Ocean Plan (SWRCB 2006)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Bean Hollow State Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	These samples were collected for the Beach Watch progam for San Mateo County Environmental Health.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46914, Fecal Coliform **Region 3**

Pacific Ocean at Bean Hollow State Beach

LOE ID:	56048
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Bean Hollow State Beach and results are as follows: 0 of 107 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Bean Hollow State Beach was collected at 1 monitoring site [Bean Hollow State Beach]
Temporal Representation:	Data was collected over the time period 1/22/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 46915 Region 3

Pacific Ocean at Bean Hollow State Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Zero of 72 samples exceeded the geometric mean standard for total coliform (LOE 56051) and 0 of 107 samples exceeded the single sample maximum for total coliform (LOEs 56050) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 72 samples exceeded the geometric mean standard for total coliform (LOE 56051) and 0 of 107 samples exceeded the single sample maximum for total coliform (LOEs 56050) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46915, Total Coliform Region 3

Pacific Ocean at Bean Hollow State Beach

LOE ID:	56050
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's

	Environmental Health Department for Pacific Ocean at Bean Hollow State Beach to determine beneficial use support and results are as follows: 0 of 107 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Bean Hollow State Beach was collected at 1 monitoring site [Bean Hollow State Beach]
Temporal Representation:	Data was collected over the time period 1/22/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46915, Total Coliform **Region 3**

Pacific Ocean at Bean Hollow State Beach

LOE ID:	56051
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	72
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 72 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Bean Hollow State Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam for San Mateo County Environmental Health.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Gazos Creek Beach**
Water Body ID: **CAC304200102011092310104 5**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **46939** **Region 3**
Pacific Ocean at Gazos Creek Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 75 samples exceeded the geometric mean standard for enterococcus (LOE 56142) and 1 of 111 samples exceeded the single sample maximum for enterococcus (LOE 56141) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 75 samples exceeded the geometric mean standard for enterococcus (LOE 56142) and 1 of 111 samples exceeded the single sample maximum for enterococcus (LOE 56141) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46939, Enterococcus **Region 3**
Pacific Ocean at Gazos Creek Beach

LOE ID: 56141

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	111
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Gazos Creek Beach to determine beneficial use support and results are as follows: 1 of 111 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gazos Creek Beach was collected at 1 monitoring site [Gazos Creek Access]
Temporal Representation:	Data was collected over the time period 1/8/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46939, Enterococcus **Region 3**

Pacific Ocean at Gazos Creek Beach

LOE ID:	56142
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	75
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 75 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Gazos Creek Access.

Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 46940 **Region 3**

Pacific Ocean at Gazos Creek Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 79 samples exceeded the geometric mean standard for fecal coliform (LOE 56144) and 1 of 112 samples exceeded the single sample maximum for fecal coliform (LOE 56143) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 79 samples exceeded the geometric mean standard for fecal coliform (LOE 56144) and 1 of 112 samples exceeded the single sample maximum for fecal coliform (LOE 56143) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46940, Fecal Coliform **Region 3**

Pacific Ocean at Gazos Creek Beach

LOE ID:	56143
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Gazos Creek Beach and results are as follows: 1 of 112 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gazos Creek Beach was collected at 1 monitoring site [Gazos Creek Access]
Temporal Representation:	Data was collected over the time period 1/8/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46940, Fecal Coliform **Region 3**

Pacific Ocean at Gazos Creek Beach

LOE ID:	56144
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	79
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 79 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Gazos Creek Access.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	

QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 46941 **Region 3**

Pacific Ocean at Gazos Creek Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 79 samples exceeded the geometric mean standard for total coliform (LOE 56152), 0 of 112 samples exceeded the single sample maximum for total coliform (LOE 56151), and 1 of 112 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 56153) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 79 samples exceeded the geometric mean standard for total coliform (LOE 56152), 0 of 112 samples exceeded the single sample maximum for total coliform (LOE 56151), and 1 of 112 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 56153) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46941, Total Coliform **Region 3**

Pacific Ocean at Gazos Creek Beach

LOE ID:	56151
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's

	Environmental Health Department for Pacific Ocean at Gazos Creek Beach to determine beneficial use support and results are as follows: 0 of 112 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gazos Creek Beach was collected at 1 monitoring site [Gazos Creek Access]
Temporal Representation:	Data was collected over the time period 1/8/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46941, Total Coliform **Region 3**

Pacific Ocean at Gazos Creek Beach

LOE ID:	56152
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	79
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 79 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Gazos Creek Access.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46941, Total Coliform **Region 3**

Pacific Ocean at Gazos Creek Beach

LOE ID:	56153
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 112 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Gazos Creek Access.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46941, Total Coliform **Region 3**

Pacific Ocean at Gazos Creek Beach

LOE ID:	56145
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	112
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Gazos Creek Beach to determine beneficial use support and results are as follows: 11 of 112 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained

	throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gazos Creek Beach was collected at 1 monitoring site [Gazos Creek Access]
Temporal Representation:	Data was collected over the time period 1/8/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Monterey Bay at Point Santa Cruz**
Water Body ID: **CAC304120532011071315491 0**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **49283** **Region 3**
Monterey Bay at Point Santa Cruz

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49283, Arsenic **Region 3**
Monterey Bay at Point Santa Cruz

LOE ID: 77562

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49284 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49284, Cadmium **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77563
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to

	levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49285 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49285, Chlordane **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77564
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	47522	Region 3
Monterey Bay at Point Santa Cruz		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47522, Chlorpyrifos	**Region 3**
Monterey Bay at Point Santa Cruz	

LOE ID:	77565
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49286 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49286, DDT (Dichlorodiphenyltrichloroethane) Region 3

Monterey Bay at Point Santa Cruz

LOE ID:	77568
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49287 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49287, Dieldrin Region 3

Monterey Bay at Point Santa Cruz

LOE ID:	77569
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49289 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49289, Endosulfan **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77570
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49290 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49290, Endrin **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77571
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends

(NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID 49292 **Region 3**

Monterey Bay at Point Santa Cruz

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49292, Heptachlor epoxide **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77573
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49293 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of

16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49293, Hexachlorobenzene/ HCB **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77574
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49297	Region 3
Monterey Bay at Point Santa Cruz		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49297, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77572
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49298 **Region 3**

Monterey Bay at Point Santa Cruz

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49298, Mercury **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77575
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49299 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of zero tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero tissue samples exceeded the evaluation guideline. This does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49299, Mirex **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77576
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends

(NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID 49300 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49300, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Monterey Bay at Point Santa Cruz

LOE ID:	77577
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49300, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77578
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49302 Region 3

Monterey Bay at Point Santa Cruz

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49302, PCBs (Polychlorinated biphenyls) **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77579
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID **49303** **Region 3**

Monterey Bay at Point Santa Cruz

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49303, Selenium **Region 3**

Monterey Bay at Point Santa Cruz

LOE ID:	77580
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay at Point Santa Cruz to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBSC.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/22/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Jameson Lake**
Water Body ID: **CAL3145104020091208102831**
Water Body Type: **Lake & Reservoir**

DECISION ID **51431** **Region 3**
Jameson Lake

Pollutant: **Aldrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51431, Aldrin **Region 3**
Jameson Lake

LOE ID: 54526

Pollutant: Aldrin
LOE Subgroup: Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51431, Aldrin **Region 3**

Jameson Lake

LOE ID:	54525

Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51433** **Region 3**

Jameson Lake

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use nor did the single fish tissue sample exceed the evaluation guideline applied to protect the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51433, Chlordane **Region 3**

Jameson Lake

LOE ID:	54532
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51433, Chlordane **Region 3**

Jameson Lake

LOE ID:	54531
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51433, Chlordane **Region 3**

Jameson Lake

LOE ID:	54530
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51445**	**Region 3**
Jameson Lake		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51445, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Jameson Lake

LOE ID:	54558
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51445, DDT (Dichlorodiphenyltrichloroethane) Region 3

Jameson Lake

LOE ID:	54557
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'-

	isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51445, DDT (Dichlorodiphenyltrichloroethane) Region 3

Jameson Lake

LOE ID:	54556
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of

	the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'-isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51434**	**Region 3**
Jameson Lake		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single

fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51434, Dieldrin **Region 3**

Jameson Lake

LOE ID:	54534
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51434, Dieldrin **Region 3**

Jameson Lake

LOE ID:	54533
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51434, Dieldrin **Region 3**

Jameson Lake

LOE ID:	54535
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51435**	**Region 3**
Jameson Lake		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51435, Endrin **Region 3**

Jameson Lake

LOE ID:	54539
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51435, Endrin **Region 3**

Jameson Lake

LOE ID:	54540
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51435, Endrin **Region 3**

Jameson Lake

LOE ID:	54541
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51437**	**Region 3**
Jameson Lake		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51437, Heptachlor **Region 3**

Jameson Lake

LOE ID:	54542
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in

	the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51437, Heptachlor **Region 3**

Jameson Lake

LOE ID:	54543
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were

	collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51438**	**Region 3**
Jameson Lake		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51438, Heptachlor epoxide	**Region 3**
Jameson Lake	

LOE ID:	54544
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51438, Heptachlor epoxide **Region 3**

Jameson Lake

LOE ID:	54546
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and

Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51438, Heptachlor epoxide **Region 3**

Jameson Lake

LOE ID:	54545
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan

QAPP Information Reference(s):	"Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51440**	**Region 3**
Jameson Lake		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51440, Hexachlorobenzene/ HCB	**Region 3**
Jameson Lake	

LOE ID:	54547
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51439**	**Region 3**
Jameson Lake		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51439, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Jameson Lake

LOE ID:	54548
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51439, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Jameson Lake

LOE ID:	54549
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).

Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51439, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Jameson Lake

LOE ID:	54550
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: rainbow trout.

	Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51442**	**Region 3**
Jameson Lake		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51442, Mercury **Region 3**

Jameson Lake

LOE ID:	54551
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury. Two composites were generated from rainbow trout (5 fish per composite) and were averaged for the location. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51443**	**Region 3**
Jameson Lake		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51443, Mirex **Region 3**

Jameson Lake

LOE ID:	54552
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition

	65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51444	Region 3
Jameson Lake		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51444, PCBs (Polychlorinated biphenyls) **Region 3**

Jameson Lake

LOE ID:	54553
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan

QAPP Information Reference(s):	"Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51444, PCBs (Polychlorinated biphenyls) Region 3

Jameson Lake

LOE ID:	54554
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51444, PCBs (Polychlorinated biphenyls) **Region 3**

Jameson Lake

LOE ID:	54555
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of

	the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51432**	**Region 3**
Jameson Lake		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51432, alpha-Endosulfan (Endosulfan 1)	**Region 3**
Jameson Lake	

LOE ID:	54527
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51432, alpha-Endosulfan (Endosulfan 1) Region 3

Jameson Lake

LOE ID:	54528
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51432, alpha-Endosulfan (Endosulfan 1) **Region 3**

Jameson Lake

LOE ID:	54529
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Jameson Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: rainbow trout. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Jameson Lake was collected at 1 monitoring site [Jameson Lake - 314TJ0396]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 11/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).

QAPP Information Reference(s): Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean (Salinas River to Point Pinos)**
Water Body ID: **CAO309110102009061208430 4**
Water Body Type: **Ocean**

DECISION ID **51812** **Region 3**
Pacific Ocean (Salinas River to Point Pinos)

Pollutant: **Copper**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero out of three water samples exceeded the evaluation guideline applied to protect the marine habitat beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three water samples exceeded the evaluation guideline applied to protect the marine habitat beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51812, Copper **Region 3**
Pacific Ocean (Salinas River to Point Pinos)

LOE ID: 56034

Pollutant: Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the 6-month median concentration of 3 ug/L for dissolved copper in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 3 ug/L for dissolved copper to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	A total of four grab samples were collected during each sampling event from outside the marina basin (Sites 5, 6, 7, & 8). Sample results were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID 52327 Region 3

Pacific Ocean (Salinas River to Point Pinos)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of three water samples exceeded the evaluation guideline for the marine habitat beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52327, Zinc **Region 3**

Pacific Ocean (Salinas River to Point Pinos)

LOE ID:	56040
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the 6-month median concentration of 20 ug/L for dissolved zinc in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L for dissolved zinc in saltwater to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	A total of four grab samples were collected during each sampling event from outside the marina basin (Sites 5, 6, 7, & 8). Sample results were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean (Point Pinos to Point Sur)**
Water Body ID: **CAO30800010200906120852 24**
Water Body Type: **Ocean**

DECISION ID **43137** **Region 3**
Pacific Ocean (Point Pinos to Point Sur)

Pollutant: **Dieldrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

A single line of evidence is available in the administrative record to assess this pollutant. One of the 20 samples exceed the OEHHA screening value for Shellfish Harvesting.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 20 samples exceed the OEHHA screening value for Shellfish Harvesting and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43137, Dieldrin **Region 3**
Pacific Ocean (Point Pinos to Point Sur)

LOE ID: 30098

Pollutant: Dieldrin
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 20
Number of Exceedances: 1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Resident mussles (composites (40-50 individuals) of resident Mytilus californianus) were collected by CCLEAN staff twice a year in 2002, 2003, 2004, 2005 and 2006 at two sample locations. One of the 20 composite samples exceeded the OEHHA screening value for shellfish.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999). OEHHA Screening Value in fish and shellfish tissue for Dieldrin is 2.0 ug/Kg.
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Mussles were collected from two coastal locations: Rock outcrop adjacent to Carmel River Mouth (Ocean View Avenue in Carmel, where it ends at Scenic Road) and rock outcrop at Fanshell overlook (just west of the intersection of Spyglass Hill Road and 17Mile Drive).
Temporal Representation:	Samples were collected twice a year in 2002, 2003, 2004, 2005 and 2006.
Environmental Conditions:	
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean (Point Ano Nuevo to Soquel Point)**
Water Body ID: **CAO30411022200906120825 44**
Water Body Type: **Ocean**

DECISION ID **51809** **Region 3**
Pacific Ocean (Point Ano Nuevo to Soquel Point)

Pollutant: **Copper**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero out of three water samples exceeded the evaluation guideline applied to protect the marine habitat beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three water samples exceeded the evaluation guideline applied to protect the marine habitat beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51809, Copper **Region 3**
Pacific Ocean (Point Ano Nuevo to Soquel Point)

LOE ID: 56030

Pollutant: Copper

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the 6-month median concentration of 3 ug/L for dissolved copper in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 3 ug/L for dissolved copper to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	A total of four grab samples were collected from outside the Santa Cruz marina basin (Sites 5, 6, 7 & 8), these were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID 53282 Region 3

Pacific Ocean (Point Ano Nuevo to Soquel Point)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for protection of Marine Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53282, Oxygen, Dissolved **Region 3**

Pacific Ocean (Point Ano Nuevo to Soquel Point)

LOE ID:	56031
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 12 minimum of Dissolved Oxygen concentrations had 0 exceedences.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	...the following objectives shall also apply to all ocean waters, including Monterey and Carmel Bays: ...nor shall the minimum dissolved oxygen concentration be reducedbelow 5.0 mg/L at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Santa Cruz Harbor 5.1 Santa Cruz Harbor 5.2 Santa Cruz Harbor 5.3 Santa Cruz Harbor 6.1 Santa Cruz Harbor 6.2 Santa Cruz Harbor 6.3 Santa Cruz Harbor 7.1 Santa Cruz Harbor 7.2 Santa Cruz Harbor 7.3 Santa Cruz Harbor 8.1 Santa Cruz Harbor 8.2 Santa Cruz Harbor 8.3
Temporal Representation:	Samples were collected once a month from August 2006 to October 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID 52322 **Region 3**

Pacific Ocean (Point Ano Nuevo to Soquel Point)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of three water samples exceeded the evaluation guideline for the marine habitat beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52322, Zinc **Region 3**

Pacific Ocean (Point Ano Nuevo to Soquel Point)

LOE ID:	56033
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the 6-month median concentration of 20 ug/L for dissolved zinc in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan Table B lists 6-month median concentration of 20 ug/L for dissolved zinc in saltwater to protect aquatic life in marine waters.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	A total of four grab samples were collected from outside the Santa Cruz marina basin (Sites 5, 6, 7, & 8), these were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID 53283 Region 3

Pacific Ocean (Point Ano Nuevo to Soquel Point)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for protection of Marine Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53283, pH Region 3

Pacific Ocean (Point Ano Nuevo to Soquel Point)

LOE ID:	56032
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 12 minimums and maximums had no exceedences.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Santa Cruz Harbor 5.1 Santa Cruz Harbor 5.2 Santa Cruz Harbor 5.3 Santa Cruz Harbor 6.1 Santa Cruz Harbor 6.2 Santa Cruz Harbor 6.3 Santa Cruz Harbor 7.1 Santa Cruz Harbor 7.2 Santa Cruz Harbor 7.3 Santa Cruz Harbor 8.1 Santa Cruz Harbor 8.2 Santa Cruz Harbor 8.3
Temporal Representation:	Samples were collected once a month from August 2006 to October 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID 43101 Region 3

Pacific Ocean (Point Ano Nuevo to Soquel Point)

Pollutant:	**Dieldrin**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Twelve of the 34 composite samples exceed the OEHHA screening value. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 34 composite samples exceed the OEHHA screening value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43101, Dieldrin **Region 3**

Pacific Ocean (Point Ano Nuevo to Soquel Point)

LOE ID:	30099
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	34
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Resident mussles (composites (40-50 individuals) of resident Mytilus californianus) were collected by CCLEAN staff twice a year in 2002, 2003, 2004, 2005 and 2006 at two sample locations. Twelve of the 34 composite samples exceeded the OEHHA screening value for shellfish.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999). OEHHA Screening Value in fish and shellfish tissue for Dieldrin is 2.0 ug/Kg.
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Mussles were collected from three coastal locations: rock crop adjacent to Scott Creek Mouth, rock outcrop adjacent to Laguna Creek mouth and rock outcrop at the Hook (end of 41st street in Santa Cruz)
Temporal Representation:	Samples were collected twice a year at the Scott Creek site in 2002, 2003, 2004, 2005 and 2006. Samples were collected twice a year at the Hook site in 2004, 2005 and 2006 and once a year in 2002 and 2003. Samples were collected twice a year at the Laguna Creek site in 2003, and 2006 and once in 2002, 2004 and 2005.
Environmental Conditions:	
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Alisal Slough (Monterey County)**
Water Body ID: **CAR3091101020090311204028**
Water Body Type: **River & Stream**

DECISION ID **42946** **Region 3**
Alisal Slough (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Delist from 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/07/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Six of 58 samples exceed the Cold Freshwater Habitat objective and none of the 58 samples exceed the objective for Warm Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Water Habitats. Therefore, the use support rating for this pollutant is set at insufficient information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 58 samples exceed the Cold Freshwater Habitat objective and none of the 58 samples exceed the objective for Warm Freshwater Habitat and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 42946, Oxygen, Dissolved **Region 3**
Alisal Slough (Monterey County)

LOE ID: 27933

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42946, Oxygen, Dissolved **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27932
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 5 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42946, Oxygen, Dissolved **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27931
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 9 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [

	309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42946, Oxygen, Dissolved **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27930
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 9 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42946, Oxygen, Dissolved **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53059

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 7 of 33 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42946, Oxygen, Dissolved **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53063
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42946, Oxygen, Dissolved **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53062
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42946, Oxygen, Dissolved **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53058
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 7 of 33 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 42979 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The pollutant name for this decisions has been changed to Toxicity. In previous listing cycles, separate fact sheets were developed for Sediment Toxicity and Unknown Toxicity (AKA water toxicity). In this current assessment cycle, those two fact sheets and all of the associated LOEs are combined into this single fact sheet for Toxicity. This water body segment was on the 2010-303(d) List for both water and sediment toxicity. Fourteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Ten LOEs summarize water samples. Seven samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and 11

additional samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, 18 total samples are available to assess this pollutant. Four of the 18 samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. All four of the samples exhibited significant toxicity to survival and/or reproduction of Ceriodaphnia dubia and one of the samples also exhibited significant toxicity (reduced cell growth) to the algae Selenastrum.

Four lines of evidence are available in the administrative record to assess toxicity in sediment samples. Three samples are summarized in LOEs with the test organism name as the pollutant (i.e. invertebrate toxicity) and three additional samples summarized in LOEs with the pollutant name Â‘toxicityÂ’. Therefore, six total samples are available to assess this pollutant. Two of the 6 samples were toxic to invertebrate test organisms (exhibited a significant increase in mortality compared to the laboratory control) and therefore exceed the narrative water quality objective for toxicity, set to protect for aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. However, there is insufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because although a TMDL has been completed and approved by RWQCB and USEPA for water toxicity (formerly called Unknown Toxicity on the 303(d) List), and is expected to result in attainment of the standard there is not yet an approved TMDL for sediment toxicity.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 18 water samples and two of the six sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27959
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected on a single day 9/27/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27960
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn].
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27948
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 4/11/2005-5/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27949
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 4/11/2005-5/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27958
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected on a single day 9/27/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27954
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27951
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27952

Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27957
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn].
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27953
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53078
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Two of the 11 samples exhibited significant toxicity. The samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia. The sample from 2/6/09 resulted in complete mortality to Ceriodaphnia dubia within 24 hours. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count

	(growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 309ASB Alisal Creek at the White Barn.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53079
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the three samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 309ASB Alisal Slough at white barn.
Temporal Representation:	The samples were collected annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	78395
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Two of the 11 samples exhibited significant toxicity. The samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia. The sample from 2/6/09 resulted in complete mortality to Ceriodaphnia dubia within 24 hours. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064

Spatial Representation:	The samples were collected at 309ASB Alisal Creek at the White Barn.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42979, Toxicity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	78394
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the three samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 309ASB Alisal Slough at white barn.
Temporal Representation:	The samples were collected annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 44072 **Region 3**

Alisal Slough (Monterey County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Five of the 6 nitrate samples exceed the water quality objectives for the Agriculture beneficial use. Eighteen of the 18 nitrate samples and 17 of the 19 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use.

Eighteen of the 18 nitrate samples and all 36 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 5.03 mg/L to 17.7 mg/L, often exceeding (falling below) the Cold freshwater habitat objective and at times exceeding the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentration ranged from 0.0 to 50 ug/L, at times exceeding screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 3.69 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 88 g/m2 ash-free dry weight (AFDW). This exceeds the Cold water screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic chlorophyll a concentration of 219 mg/m2. This exceeds the Cold water screening threshold of 150 mg/m2 and the Warm water screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 6 nitrate samples exceed the water quality objectives for the Agriculture beneficial use. Eighteen of the 18 nitrate samples and 17 of the 19 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. These all exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Eighteen of the 18 nitrate samples and all 36 nitrate/nitrite samples exceed the evaluation guideline for Cold and Warm Freshwater Habitat and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

5. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015.
6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53044
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 34 of 36 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (California Code of Regulation, Title 22, Division 4, Chapter 15, Section 64431, Table 64431-A).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53047
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53046
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53045
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Water Quality Control Plan, Central Coast Region).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27956
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27941

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27938
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	48226
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alisal Slough to determine beneficial use support and results are as follows: 36 of 36 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alisal Slough was collected at 1 monitoring site [309ASB - Alisal Creek at White Barn]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	48224
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alisal Slough to determine beneficial use support and results are as follows: 36 of 36 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alisal Slough was collected at 1 monitoring site [309ASB - Alisal Creek at White Barn]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27955
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 17 of 19 samples exceed the criterion for Nitrate/Nitrite as
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44072, Nitrate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27940
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42908 **Region 3**

Alisal Slough (Monterey County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 57 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 57 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. This does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42908, Chlorophyll-a **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53022
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A â€“ Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42908, Chlorophyll-a **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53021
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A â€“ Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42908, Chlorophyll-a — Region 3

Alisal Slough (Monterey County)

LOE ID:	27923
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn].
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42908, Chlorophyll-a — Region 3

Alisal Slough (Monterey County)

LOE ID:	27924
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42966 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Zero of the three samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42966, Chlorpyrifos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27925
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42966, Chlorpyrifos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27926
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42966, Chlorpyrifos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53024
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42966, Chlorpyrifos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53023
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42966, Chlorpyrifos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53025
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46608 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 5 samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceeded the Central Coast Basin Plan general objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46608, Demeton Region 3

Alisal Slough (Monterey County)

LOE ID:	53026
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46608, Demeton **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53028
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46608, Demeton **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53029
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46608, Demeton **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53027
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46609 **Region 3**

Alisal Slough (Monterey County)

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the 5 samples exceed any of the water quality objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed any of the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46609, Dichlorvos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	52998
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46609, Dichlorvos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	52996
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1

	monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46609, Dichlorvos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	52995
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46609, Dichlorvos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	52994
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46609, Dichlorvos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	52997
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46609, Dichlorvos **Region 3**

Alisal Slough (Monterey County)

LOE ID:	78396
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46610 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the 5 samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46610, Dimethoate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53057
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46610, Dimethoate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53056
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46610, Dimethoate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53055
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]

Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46610, Dimethoate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53054
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46610, Dimethoate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53053
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46610, Dimethoate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53052
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46611 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 5 samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46611, Disulfoton — Region 3

Alisal Slough (Monterey County)

LOE ID:	53031
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46611, Disulfoton — Region 3

Alisal Slough (Monterey County)

LOE ID:	53060
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46612 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 5 samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46612, Ethoprop **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53035
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46612, Ethoprop **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53034

Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46612, Ethoprop **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53033
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46612, Ethoprop **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53032
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46613 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the five samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the five samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46613, Malathion Region 3

Alisal Slough (Monterey County)

LOE ID:	53036
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46613, Malathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53037
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46613, Malathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53038
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46613, Malathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53048
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46613, Malathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53049
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46613, Malathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53050
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46614 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the five samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the five samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46614, Methyl Parathion Region 3

Alisal Slough (Monterey County)

LOE ID:	53051
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46614, Methyl Parathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53039
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46614, Methyl Parathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53040
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46614, Methyl Parathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53041
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46614, Methyl Parathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53042
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46614, Methyl Parathion **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53043
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46615 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the five samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the five samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46615, Phorate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53074
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46615, Phorate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53073

Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46615, Phorate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53072
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46615, Phorate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53071
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46615, Phorate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53070
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46615, Phorate **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53069
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46616 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Five of the 33 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 33 samples exceed the water quality objective and this does not exceed the allowable

	frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46616, Temperature, water **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53076
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 5 of 33 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **42313** **Region 3**

Alisal Slough (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Nine of the 58 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater habitat and Municipal & Domestic Supply. Two of the 58 samples exceed the numeric objectives for Water Contact and Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Nine of the 58 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater habitat and Municipal & Domestic Supply. Two of the 58 samples exceed the numeric objectives for Water Contact and Non-Contact Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53068
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53067
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	33
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 7 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53066
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 7 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53065
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	33
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 7 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53064
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27946
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27947
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27945
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27943
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27944
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42313, pH **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27942
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]

Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 46617 **Region 3**

Alisal Slough (Monterey County)

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of the 32 samples exceed the evaluation guideline used to interpret the water quality objective established to protect for Cold Water Habitat and 19 of the 32 samples also exceeded the evaluation guideline used to interpret the water quality objective established to protect for Warm Water Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-five of the 32 samples exceed the evaluation guideline used to interpret the water quality objective established to protect for Cold Water Habitat and 19 of the 32 samples also exceeded the evaluation guideline used to interpret the water quality objective established to protect for Warm Water Habitat. Each of these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 46617, Turbidity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53080
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 19 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Shoup, D.E. and D.H. Wahl (2009) states that largemouth bass had more difficulty in capturing rapidly moving fish prey at 40 NTU and the overall foraging rate was much lower.
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46617, Turbidity **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53081
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 25 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **35030** **Region 3**

Alisal Slough (Monterey County)

Pollutant:	**Ammonia**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Grazing-Related Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data and two aquatic life beneficial uses. Five of 56 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and none of 60 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 56 samples exceed the water quality objective for unionized ammonia and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Lower Salinas River Watershed Nutirent TMDL has been approved by the Central Coast Water Board in 2013 and approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision

After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem and should be placed on the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA.

Line of Evidence (LOE) for Decision ID 35030, Ammonia **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53018
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 4 of 33 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 35030, Ammonia **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53020
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2011 edition of the drinking water standards and health advisories. (EPA 822-R-06-013, 2011).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 35030, Ammonia **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53019
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 4 of 33 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 35030, Ammonia **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27920
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Ammonia as N, Union
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35030, Ammonia **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27921

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Ammonia as N, Union
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35030, Ammonia **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27939
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia As N, Total
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42974 Region 3

Alisal Slough (Monterey County)

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Two of the 5 samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the three samples exceed the USEPA drinking water health advisory.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 5 samples exceed the evaluation guideline (Finlayson, 2004)applied to protect aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Lower Salinas Watershed Chlorpyrifos and Diazinon TMDL was approved by the USEPA on 10/7/2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42974, Diazinon **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27927
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [

	309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42974, Diazinon **Region 3**

Alisal Slough (Monterey County)

LOE ID:	27928
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alisal Slough (Salinas) was collected at 1 monitoring site [309ASB - Alisal Slough at White Barn]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42974, Diazinon **Region 3**

Alisal Slough (Monterey County)

LOE ID:	53030
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42974, Diazinon **Region 3**

Alisal Slough (Monterey County)

LOE ID:	52993
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42974, Diazinon **Region 3**

Alisal Slough (Monterey County)

LOE ID:	52992
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Slough (Monterey County) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alisal Slough (Monterey County) was collected at 1 monitoring site [Alisal Slough at White Barn - 309ASB]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Majors Creek (Monterey County)**
Water Body ID: **CAR3095004220090226140639**
Water Body Type: **River & Stream**

DECISION ID **42999** **Region 3**
Majors Creek (Monterey County)

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the 12 samples exceed the water quality objectives for Agricultural Supply or Municipal & Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 12 samples exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42999, Nitrate **Region 3**
Majors Creek (Monterey County)

LOE ID: 27534

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42999, Nitrate **Region 3**

Majors Creek (Monterey County)

LOE ID:	27533
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride

	concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/10/2000-11/8/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42772 Region 3

Majors Creek (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of theone of the 3 samples exceed the Cold Freshwater Habitat water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. 3 samples exceed the Cold Freshwater Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Cold Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42772, Oxygen, Dissolved Region 3

Majors Creek (Monterey County)

LOE ID:	27527
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring sites [309-MAJOR-31 - Major Sherman].
Temporal Representation:	Data was collected over the time period 5/17/2003-5/1/04. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42657 Region 3

Majors Creek (Monterey County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 14 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 14 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42657, Temperature, water **Region 3**

Majors Creek (Monterey County)

LOE ID:	27529
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/30/2001-11/8/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42657, Temperature, water **Region 3**

Majors Creek (Monterey County)

LOE ID:	27528
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42735 Region 3

Majors Creek (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Three of the 14 samples exceed the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 14 samples exceed the water quality objectives sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42735, pH **Region 3**

Majors Creek (Monterey County)

LOE ID:	27544
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/30/2001-9/24/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42735, pH **Region 3**

Majors Creek (Monterey County)

LOE ID:	27543
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42735, pH **Region 3**

Majors Creek (Monterey County)

LOE ID:	27532
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring sites[309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42735, pH **Region 3**

Majors Creek (Monterey County)

LOE ID:	27531
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/30/2001-9/24/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42735, pH **Region 3**

Majors Creek (Monterey County)

LOE ID:	27540
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/30/2001-9/24/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42735, pH **Region 3**

Majors Creek (Monterey County)

LOE ID:	27535
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42735, pH **Region 3**

Majors Creek (Monterey County)

LOE ID:	27536
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/30/2001-9/24/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42735, pH **Region 3**

Majors Creek (Monterey County)

LOE ID:	27539
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **42843** **Region 3**

Majors Creek (Monterey County)

Pollutant:	**Copper**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of

the null hypothesis as presented in Table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 8 samples exceeded the water quality objective for copper in aquatic life habitats and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42843, Copper **Region 3**

Majors Creek (Monterey County)

LOE ID:	27516
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries). Table 3-5 (page III-11) states, the maximum concentration for copper in aquatic life habitats is 0.03 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - at Major Sherman].
Temporal Representation:	Data was collected over the time period 10/10/2000-11/8/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	42895	Region 3
Majors Creek (Monterey County)		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Natural Sources | Source Unknown | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 12 samples exceeded the water quality objective for Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42895, Escherichia coli (E. coli)	**Region 3**
Majors Creek (Monterey County)	

LOE ID:	27537
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/10/2000-11/8/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42895, Escherichia coli (E. coli) Region 3

Majors Creek (Monterey County)

LOE ID:	27541
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/10/2000-11/8/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42895, Escherichia coli (E. coli) **Region 3**

Majors Creek (Monterey County)

LOE ID:	27542
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42895, Escherichia coli (E. coli) **Region 3**

Majors Creek (Monterey County)

LOE ID:	27538
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring sites [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42433 Region 3

Majors Creek (Monterey County)

Pollutant:	**Lead**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 8 samples exceeded the water quality objective for lead in aquatic life habitats and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 42433, Lead **Region 3**

Majors Creek (Monterey County)

LOE ID:	27526
Pollutant:	Lead
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries). Table 3-5 (page III-11) states, the maximum concentration for lead in aquatic life habitats is 0.03 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/10/2000-11/8/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42726 **Region 3**

Majors Creek (Monterey County)

Pollutant:	**Zinc**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 8 samples exceeded the water quality objective for zinc in aquatic life habitats and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42726, Zinc **Region 3**

Majors Creek (Monterey County)

LOE ID:	27530
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (First Flush monitoring) (R3_FF) data for Majors Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries). Table 3-5 (page III-11) states, the maximum concentration for zinc in aquatic life habitats is 0.2 mg/L
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [309-

	MAJOR-31 - Major Sherman]
Temporal Representation:	Data was collected over the time period 10/10/2000-11/8/2005. Coastal Watershed Council First Flush Monitoring is conducted annually, following the first major storm event.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Carneros Creek (Monterey County)**
Water Body ID: **CAR3060001020090115165216**
Water Body Type: **River & Stream**

DECISION ID **42988** **Region 3**
Carneros Creek (Monterey County)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2018
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 16136) and total ammonia (Decision 16156). This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Nine lines of evidence (LOEs) are available in the administrative record to assess pollutant. Four LOEs summarize unionized ammonia data and three of the 11 samples exceed the water quality objective for aquatic life. Five LOEs summarize total ammonia data and none of the 3572 samples exceed the water quality objective for drinking water

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 11 samples exceed the water quality objective for aquatic life and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42988, Ammonia **Region 3**
Carneros Creek (Monterey County)

LOE ID: 26680

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	165
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 165 samples exceed the criterion for Ammonia As N,
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	Quality Criteria for Water 1986. United States Environmental Protection Agency. Office of Water. Regulations and Standards. Washington D.C. EPA 440/5-86-001.
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42988, Ammonia **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49755
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42988, Ammonia **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49735
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42988, Ammonia **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26650
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three out of 9 samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from March 1999 to March 2000.
Environmental Conditions:	Water body is located in the Bolsa Nueva hydrologic unit. The site is Carneros Creek in Los Lomas at Blohm Road (306CAR).
QAPP Information:	CCAMP, SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42988, Ammonia **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49726
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42988, Ammonia **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26698
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3352
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 3352 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 9 monitoring sites [CA-SMC - Carneros Creek at San Miguel Canyon Rd., CA-COR - Carneros Creek at Corey Rd., CA-KIR - Carneros Creek at Kirby Park, CA-BIR - Carneros Creek at Bend in road,
Temporal Representation:	Data was collected over the time period 10/4/2000-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42988, Ammonia **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26660
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road].
Temporal Representation:	Data was collected over the time period 3/29/1999-12/18/2006. Salinas watershed area is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42988, Ammonia **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26659
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road].
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42988, Ammonia **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52918
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Ammonia As N, Total.

Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

DECISION ID	**42279**	**Region 3**
Carneros Creek (Monterey County)		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of the 62 samples exceed the evaluation guideline. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-five of the 62 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water

quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42279, Chlorophyll-a **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52923
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42279, Chlorophyll-a **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52815

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42279, Chlorophyll-a **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26687
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	9

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 9 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 7/31/2001-5/5/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42279, Chlorophyll-a **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26651
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 13 of 23 samples exceed the criterion for Chlorophyll a.

Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road].
Temporal Representation:	Data was collected over the time period 3/29/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42279, Chlorophyll-a **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49727
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42747 Region 3

Carneros Creek (Monterey County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 20 samples exceed the water quality objective for contact recreation (i.e. swimming) and 5 of the 20 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 20 samples exceed the water quality objective for contact recreation (i.e. swimming) and 5 of the 20 samples exceed the water quality objective for non-contact recreation and these

exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42747, Fecal Coliform **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49740
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42747, Fecal Coliform **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26662
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	18
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 5 of 18 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road].
Temporal Representation:	Data was collected over the time period 4/26/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42747, Fecal Coliform **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49753
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42747, Fecal Coliform **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26661
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 15 of 18 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road].
Temporal Representation:	Data was collected over the time period 4/26/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42289 **Region 3**

Carneros Creek (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Three water quality objectives are assessed. Two-hundred-ninety of the 800 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Eighty-one of 132 samples are below 85% saturation, and the median of the data does exceed (fall below) the Objective. Although the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for Cold, though this LOE support rating is set to insufficient information, it used as supporting evidence of the severity of the impact due to low dissolved oxygen. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two-hundred-ninety of the 800 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26690
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	170
Number of Exceedances:	78
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 78 of 170 samples exceed the criterion for Oxygen, Disso
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49731
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2

samples exceed the criterion for Oxygen, Saturation.

Data Reference: Salinas Rotation field data 2007

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).

Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]

Temporal Representation: Data was collected over the time period 1/16/2007-2/20/2007.

Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID: 26679

Pollutant: Dissolved oxygen saturation

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 101

Number of Exceedances: 63

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 63 of 101 samples exceed the criterion for Oxygen, Satur

Data Reference: Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006
Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006
Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [

306CARBLR - Carneros Creek]

Temporal Representation: Data was collected over the time period 11/18/1996-10/10/2006.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID: 26699

Pollutant: Oxygen, Dissolved

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 598

Number of Exceedances: 195

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Carneros Creek to determine beneficial use support and results are as follows: 195 of 598 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A
Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carneros Creek was collected at 9 monitoring sites [CA-COR - Carneros Creek at Corey Rd., CA-SMC - Carneros Creek at San Miguel Canyon Rd., CA-KIR - Carneros Creek at Kirby Park, CA-BIR - Carneros Creek at Bend in road,

Temporal Representation: Data was collected over the time period 10/4/2000-2/11/2007.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID: 26671

Pollutant: Oxygen, Dissolved

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	22
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 13 of 22 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rota
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26672
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 15 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rota
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49730
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26703
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carneros Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306-CARNE-1 - Carneros Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26675
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carneros Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 7/6/1999-7/27/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26674
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carneros Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 7/6/1999-7/27/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52851
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42289, Oxygen, Dissolved **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52869
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

DECISION ID 42993 Region 3

Carneros Creek (Monterey County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. A total of 175 of the 339 samples exceed the evaluation guideline (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 175 of the 339 samples exceed the evaluation guideline (Sigler et al. 1984) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42993, Turbidity **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52961
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42993, Turbidity **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26691
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	186

Number of Exceedances:	95
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 95 of 186 samples exceed the criterion for Turbidity(NTU
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42993, Turbidity **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26692
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	137
Number of Exceedances:	71
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Carneros Creek to determine beneficial use support and results are as follows: 71 of 137 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 8 monitoring sites [CA-SMC - Carneros Creek at San Miguel Canyon Rd., CA-KIR - Carneros Creek at Kirby Park, CA-COR - Carneros Creek at Corey Rd., CA-BIR - Carneros Creek at Bend in road,
Temporal Representation:	Data was collected over the time period 9/21/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42993, Turbidity **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49733
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42993, Turbidity **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26678
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 6 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rot
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42828 Region 3

Carneros Creek (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. One hundred seventy-seven of the 839 samples exceed the water quality objectives for Drinking Water and Recreation and 148 of the 839 samples exceed the water quality objective for Cold Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred seventy-seven of the 839 samples exceed the water quality objectives for Drinking Water and Recreation and 148 of the 839 samples exceed the water quality objective for Cold Freshwater Habitats. Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26682
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	180
Number of Exceedances:	70
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 70 of 180 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26685
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	59
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 59 of 180 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26707
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306-CARNE-1 - Carneros Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26668
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rot
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26710
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306-CARNE-1 - Carneros Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26709
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306-CARNE-1 - Carneros Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26697
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	642
Number of Exceedances:	109
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Carneros Creek to determine beneficial use support and results are as follows: 109 of 642 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 9 monitoring sites [CA-COR - Carneros Creek at Corey Rd., CA-SMC - Carneros Creek at San Miguel Canyon Rd., CA-KIR - Carneros Creek at Kirby Park, CA-BIR - Carneros Creek at Bend in road,
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26696
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	642
Number of Exceedances:	109
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Carneros Creek to determine beneficial use support and results are as follows: 109 of 642 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 9 monitoring sites [CA-COR - Carneros Creek at Corey Rd., CA-SMC - Carneros Creek at San Miguel Canyon Rd., CA-KIR - Carneros Creek at Kirby Park, CA-BIR - Carneros Creek at Bend in road,
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26695
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	642
Number of Exceedances:	109
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Carneros Creek to determine beneficial use support and results are as follows: 109 of 642 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 9 monitoring sites [CA-COR - Carneros Creek at Corey Rd., CA-SMC - Carneros Creek at San Miguel Canyon Rd., CA-KIR - Carneros Creek at Kirby Park, CA-BIR - Carneros Creek at Bend in road,
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26694
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	642
Number of Exceedances:	71
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium

	(R3_MARC) data for Carneros Creek to determine beneficial use support and results are as follows: 71 of 642 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 9 monitoring sites [CA-COR - Carneros Creek at Corey Rd., CA-SMC - Carneros Creek at San Miguel Canyon Rd., CA-KIR - Carneros Creek at Kirby Park, CA-BIR - Carneros Creek at Bend in road,
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26686
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	180
Number of Exceedances:	59
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 59 of 180 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26708
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306-CARNE-1 - Carneros Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49732
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26684
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	180
Number of Exceedances:	59
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 59 of 180 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26665
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road].
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26666
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road].
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26667
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road].
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49739
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49742
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49754
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52915
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52938
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52945
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42828, pH **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52902
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

DECISION ID 42996 Region 3

Carneros Creek (Monterey County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Four of the 12 samples exceed the water quality objective for contact recreation (i.e. swimming) but only 2 of the samples exceeded the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 12 samples exceed the water quality objective for contact recreation (i.e. swimming) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42996, Escherichia coli (E. coli) Region 3

Carneros Creek (Monterey County)

LOE ID:	49741
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42996, Escherichia coli (E. coli) Region 3

Carneros Creek (Monterey County)

LOE ID:	26705
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306-CARNE-1 - Carneros Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42996, Escherichia coli (E. coli) Region 3

Carneros Creek (Monterey County)

LOE ID:	26663
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rot
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42996, Escherichia coli (E. coli) Region 3

Carneros Creek (Monterey County)

LOE ID:	26704
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306-CARNE-1 - Carneros Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42996, Escherichia coli (E. coli) Region 3

Carneros Creek (Monterey County)

LOE ID:	26664
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rot
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42890 Region 3

Carneros Creek (Monterey County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Sixty-six of the 823 samples exceed the evaluation guideline (Moyle 1976) used to interpret the aquatic life water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-six of the 823 samples exceed the evaluation guideline (Moyle 1976) used to interpret the aquatic life water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42890, Temperature, water Region 3

Carneros Creek (Monterey County)

LOE ID:	49734
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42890, Temperature, water **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26676
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan,

	Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 7/6/1999-7/27/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42890, Temperature, water **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26706
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306-CARNE-1 - Carneros Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42890, Temperature, water **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26688
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	189
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 35 of 189 samples exceed the criterion for Water Tempera
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42890, Temperature, water **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26693
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	602
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Carneros Creek to determine beneficial use support and results are as follows: 30 of 602 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 9 monitoring sites [CA-COR - Carneros Creek at Corey Rd., CA-SMC - Carneros Creek at San Miguel Canyon Rd., CA-KIR - Carneros Creek at Kirby Park, CA-BIR - Carneros Creek at Bend in road,
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42890, Temperature, water **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26673
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 1 of 22 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters,

	Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rota
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42890, Temperature, water **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52976
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

DECISION ID	42887	Region 3
Carneros Creek (Monterey County)		

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. One Hundred ninety-three of the 3,616 nitrate samples and zero of the 25 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply (drinking water) beneficial use. However, four of the 31 nitrate samples three of the 16 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 1. Dissolved oxygen for this water body ranged from 0.71 mg/L to 14.49 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and at times exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). This water body is on the 303(d) List for dissolved oxygen. 2. Water column chlorophyll a concentration ranged from 1.0 to 970 ug/L, frequently exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 3. Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 1.68 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 31 nitrate samples three of the 16 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy and there is sufficient supporting evidence to support the conclusion that nitrate causes or contributes to eutrophic conditions in the water body segment. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42887, Nitrate	Region 3
Carneros Creek (Monterey County)	

LOE ID:	52841
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 4 of 29 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52831
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	29
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 4 of 29 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52837
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for Nitrate as N.

Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52892
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S

QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52907
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	52868

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CARBLR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49767
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49766
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49738
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]

Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26654
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road].
Temporal Representation:	Data was collected over the time period 3/29/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26689
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/10/2006-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26701
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3371
Number of Exceedances:	189
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Carneros Creek to determine beneficial use support and results are as follows: 189 of 3371 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 9 monitoring sites [CA-SMC - Carneros Creek at San Miguel Canyon Rd., CA-COR - Carneros Creek at Corey Rd., CA-KIR - Carneros Creek at Kirby Park, CA-BIR - Carneros Creek at Bend in road,
Temporal Representation:	Data was collected over the time period 10/4/2000-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26702
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306-CARNE-1 - Carneros Creek]
Temporal Representation: Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID: 49737

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference: Salinas Rotation field data 2007

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation: Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID: 26681

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	171
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Carneros Creek to determine beneficial use support and results are as follows: 4 of 171 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CARBLR - Carneros Creek]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49728
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26658
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed

	in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 3/29/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rot
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42887, Nitrate **Region 3**

Carneros Creek (Monterey County)

LOE ID:	49729
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carneros Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carneros Creek (Monterey County) was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]

Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42886 **Region 3**

Carneros Creek (Monterey County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Three LOEs summarize water samples. Three water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in water samples. Zero of the three water samples resulted in a significant toxic effect to one or more test organisms. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 samples exhibited significant toxic effects to the test organisms relative to the controls and therefore zero exceed the water quality objective for aquatic life protection. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42886, Toxicity **Region 3**

Carneros Creek (Monterey County)

LOE ID: 26712

Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42886, Toxicity **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26714
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/15/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42886, Toxicity **Region 3**

Carneros Creek (Monterey County)

LOE ID:	26711
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Carneros Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carneros Creek was collected at 1 monitoring site [306CAR-Carneros Creek in Los Lomas at Blohm Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)**
Water Body ID: **CAC315340122010062214585 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37875** **Region 3**
Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One of 121 samples exceeded the geometric mean standard for enterococcus (LOEs 20087 and 56477) and 4 of 235 samples exceeded the single sample maximum for enterococcus (LOEs 20088 and 56476) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 121 samples exceeded the geometric mean standard for enterococcus (LOEs 20087 and 56477) and 4 of 235 samples exceeded the single sample maximum for enterococcus (LOEs 20088 and 56476) for the water contact recreation water quality standard. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37875, Enterococcus **Region 3**
Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID: 56477

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 89 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Rincon at Bates Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37875, Enterococcus **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	56476
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 0 of 92 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at 1 monitoring site [Rincon at Bates Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37875, Enterococcus **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	20087
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at one AB411 monitoring site (Rincon at Bates Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37875, Enterococcus **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	20088
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	143
Number of Exceedances:	4

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 4 of 143 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at one AB411 monitoring site (Rincon at Bates Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37874 Region 3

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 121 samples exceeded the geometric mean standard for fecal coliform (LOEs 20085 and 56485) and 3 of 236 samples exceeded the single sample maximum for fecal coliform (LOEs 20086 and 56478) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 121 samples exceeded the geometric mean standard for fecal coliform (LOEs 20085 and 56485) and 3 of 236 samples exceeded the single sample maximum for fecal coliform (LOEs 20086 and 56478) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37874, Fecal Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	20086
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	144
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 3 of 144 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at one AB411 monitoring site (Rincon at Bates Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37874, Fecal Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	20085
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at one AB411 monitoring site (Rincon at Bates Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37874, Fecal Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	56478
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) and results are as follows: 0 of 92 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at 1 monitoring site [Rincon at Bates Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37874, Fecal Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	56485
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 89 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Rincon at Bates Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37876 **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Five of 92 samples (LOE 56486) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 121 samples exceeded the geometric mean standard for total coliform (LOEs 20090 and 56488), 3 of 235 samples exceeded the single sample maximum for total coliform (LOEs 20089 and 56487), and 1 of 142 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20107) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 92 samples (LOE 56486) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 121 samples exceeded the geometric mean standard for total coliform (LOEs 20090 and 56488), 3 of 235 samples exceeded the single sample maximum for total coliform (LOEs 20089 and 56487), and 1 of 142 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20107) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37876, Total Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	56488
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 89 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Rincon at Bates Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	

QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37876, Total Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	56487
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 0 of 92 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at 1 monitoring site [Rincon at Bates Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37876, Total Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	56486
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	92
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 5 of 92 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at 1 monitoring site [Rincon at Bates Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37876, Total Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	20090
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at one AB411 monitoring site (Rincon at Bates Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37876, Total Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	20107
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	142
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 1 of 142 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at one AB411 monitoring site (Rincon at Bates Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37876, Total Coliform **Region 3**

Pacific Ocean at Rincon, Bates Beach (west of Rincon Point)

LOE ID:	20089
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	143
Number of Exceedances:	3

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) to determine beneficial use support and results are as follows: 3 of 143 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rincon, Bates Beach (west of Rincon Point) was collected at one AB411 monitoring site (Rincon at Bates Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave**
Water Body ID: **CAC310310252010052514 5951**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37444** **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of 203 samples exceeded the geometric mean standard for enterococcus (LOEs 20032 and 56322) and 8 of 297 samples exceeded the single sample maximum for enterococcus (LOEs 20033 and 56321) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 203 samples exceeded the geometric mean standard for enterococcus (LOEs 20032 and 56322) and 8 of 297 samples exceeded the single sample maximum for enterococcus (LOEs 20033 and 56321) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37444, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID: 20032

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37444, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID:	20033
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 6 of 107 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB13)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37444, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID: 56322

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 179
Number of Exceedances: 2

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Two of the 179 geomeans exceeded the entercoccus objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from station 1217 OCB13.
Temporal Representation: Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37444, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID: 56321

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 190
Number of Exceedances: 2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 2 of 190 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave was collected at 1 monitoring site [OCB13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 36725 Region 3

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 201 samples exceeded the geometric mean standard for fecal coliform (LOEs 20030 and 56324) and 1 of 295 samples exceeded the single sample maximum for fecal coliform (LOEs 20031 and 56323) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 201 samples exceeded the geometric mean standard for fecal coliform (LOEs 20030 and 56324) and 1 of 295 samples exceeded the single sample maximum for fecal coliform (LOEs 20031 and 56323) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36725, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID:	56323
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	189
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave and results are as follows: 0 of 189 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave was collected at 1 monitoring site [OCB13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36725, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID:	56324
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	177
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 177 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1217 OCB13.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36725, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID:	20031
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 1 of 106 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB13)

Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36725, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID:	20030
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 41570 **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and

Conclusion:	3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Twelve of 109 samples (LOE 56325) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 203 samples exceeded the geometric mean standard for total coliform (LOEs 20050 and 56333), 3 of 296 samples exceeded the single sample maximum for total coliform (LOEs 20049 and 56332), and 0 of 106 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20059) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of 109 samples (LOE 56325) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 203 samples exceeded the geometric mean standard for total coliform (LOEs 20050 and 56333), 3 of 296 samples exceeded the single sample maximum for total coliform (LOEs 20049 and 56332), and 0 of 106 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20059) for the water contact recreation water quality standard and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41570, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID:	20049
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 2 of 106 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one monitoring site (OCB13)

Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41570, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID: 20059

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 106
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 0 of 106 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one monitoring site (OCB13)

Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41570, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID: 20050

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one monitoring site (OCB13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41570, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID:	56333
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	179
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 179 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from station1217 OCB13.
Temporal Representation: Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41570, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID: 56332

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 190
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 1 of 190 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave was collected at 1 monitoring site [OCB13]
Temporal Representation: Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41570, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave

LOE ID: 56325

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	190
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave to determine beneficial use support and results are as follows: 12 of 190 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) 350 yards north of Pier Ave was collected at 1 monitoring site [OCB13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave**
Water Body ID: **CAC310310252010052515184 5**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **41581** **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of 213 samples exceeded the geometric mean standard for enterococcus (LOEs 20028 and 56335) and 10 of 304 samples exceeded the single sample maximum for enterococcus (LOEs 20029 and 56334) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 213 samples exceeded the geometric mean standard for enterococcus (LOEs 20028 and 56335) and 10 of 304 samples exceeded the single sample maximum for enterococcus (LOEs 20029 and 56334) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41581, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID: 56334

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	197
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 4 of 197 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave was collected at 1 monitoring site [OCB12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41581, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	56335
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	189
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 189 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1216 OCB12.

Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41581, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	20028
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41581, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	20029
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	6

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 6 of 107 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 41561 Region 3

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 210 samples exceeded the geometric mean standard for fecal coliform (LOEs 20026 and 56337) and 2 of 301 samples exceeded the single sample maximum for fecal coliform (LOEs 20027 and 56336) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 210 samples exceeded the geometric mean standard for fecal coliform (LOEs 20026 and 56337) and 2 of 301 samples exceeded the single sample maximum for fecal coliform (LOEs 20027 and 56336) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41561, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	20027
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 1 of 106 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41561, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	20026
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41561, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	56336
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	195
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave and results are as follows: 1 of 195 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave was collected at 1 monitoring site [OCB12]
Temporal Representation: Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41561, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID: 56337

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 186
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 186 geomeans exceeded the objective. Zero of the 186 geomeans exceeded the fecal coliform objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from station 1216 OCB12.
Temporal Representation: Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

DECISION ID 44443 **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

Pollutant: **Total Coliform**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and

Conclusion:	3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Eighteen of 196 samples (LOE 56343) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 212 samples exceeded the geometric mean standard for total coliform (LOEs 20047 and 56345), 4 of 302 samples exceeded the single sample maximum for total coliform (LOEs 20046 and 56344), and 0 of 106 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20048) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighteen of 196 samples (LOE 56343) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 212 samples exceeded the geometric mean standard for total coliform (LOEs 20047 and 56345), 4 of 302 samples exceeded the single sample maximum for total coliform (LOEs 20046 and 56344), and 0 of 106 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20048) for the water contact recreation water quality standard and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44443, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	56344
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	196
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 1 of 196 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave was collected at 1 monitoring site [OCB12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44443, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	56345
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 188 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1216 OCB12.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44443, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	56343
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	196
Number of Exceedances:	18

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 18 of 196 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave was collected at 1 monitoring site [OCB12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44443, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	20047
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one monitoring site (OCB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411

	monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44443, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	20048
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 0 of 106 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one monitoring site (OCB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44443, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave

LOE ID:	20046
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106

Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) at Pier Ave to determine beneficial use support and results are as follows: 3 of 106 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one monitoring site (OCB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way**
Water Body ID: **CAC310310252010052514520 7**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **41582** **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One of 199 samples exceeded the geometric mean standard for enterococcus (LOEs 20015 and 56347) and 7 of 295 samples exceeded the single sample maximum for enterococcus (LOEs 20016 and 56346) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 199 samples exceeded the geometric mean standard for enterococcus (LOEs 20015 and 56347) and 7 of 295 samples exceeded the single sample maximum for enterococcus (LOEs 20016 and 56346) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41582, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID: 20016

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 6 of 107 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41582, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID:	20015
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB11)

Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41582, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID: 56346

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 188
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 1 of 188 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way was collected at 1 monitoring site [OCB11]
Temporal Representation: Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41582, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID: 56347

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	175
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 175 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 191 OCB11.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37118 Region 3

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 198 samples exceeded the geometric mean standard for fecal coliform (LOEs 20013 and 56361) and 2 of 294 samples exceeded the single sample maximum for fecal coliform (LOEs 20014 and 56348) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 198 samples exceeded the geometric mean standard for fecal coliform (LOEs 20013 and 56361) and 2 of 294 samples exceeded the single sample maximum for fecal coliform (LOEs 20014 and 56348) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37118, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID:	56348
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way and results are as follows: 0 of 188 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way was collected at 1 monitoring site [OCB11]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37118, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID:	56361
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	174
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 174 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 191 OCB11.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37118, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID:	20014
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 2 of 106 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB11)

Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37118, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID:	20013
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one AB411 monitoring site (OCB11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID **41406** **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and

Conclusion:	3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Fifteen of 189 samples (LOE 56362) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 200 samples exceeded the geometric mean standard for total coliform (LOEs 20044 and 56364), 4 of 294 samples exceeded the single sample maximum for total coliform (LOEs 20043 and 56363), and 0 of 106 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20045) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of 189 samples (LOE 56362) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 200 samples exceeded the geometric mean standard for total coliform (LOEs 20044 and 56364), 4 of 294 samples exceeded the single sample maximum for total coliform (LOEs 20043 and 56363), and 0 of 106 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20045) for the water contact recreation water quality standard and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41406, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID:	20045
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 0 of 106 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one monitoring site (OCB11)

Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41406, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID: 20043

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 105
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 3 of 105 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one monitoring site (OCB11)

Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41406, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID: 20044

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach, Oceano (San Luis Obispo County) was collected at one monitoring site (OCB11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41406, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID:	56362
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	189
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 15 of 189 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day

period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way was collected at 1 monitoring site [OCB11]
Temporal Representation: Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41406, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID: 56363

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 189
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way to determine beneficial use support and results are as follows: 1 of 189 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way was collected at 1 monitoring site [OCB11]
Temporal Representation: Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41406, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County) south of Pier at Strand Way

LOE ID: 56364

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	176
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 176 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 191 OCB11.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Sycamore Canyon Creek (Monterey County)**
Water Body ID: **CAR3080004220100825173121**
Water Body Type: **River & Stream**

DECISION ID **36712** **Region 3**
Sycamore Canyon Creek (Monterey County)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation. and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36712, Escherichia coli (E. coli) **Region 3**
Sycamore Canyon Creek (Monterey County)

LOE ID: 18373

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36712, Escherichia coli (E. coli) Region 3

Sycamore Canyon Creek (Monterey County)

LOE ID:	18387
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site

	[308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37092 Region 3

Sycamore Canyon Creek (Monterey County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37092, Nitrate Region 3

Sycamore Canyon Creek (Monterey County)

LOE ID:	18169
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37046 Region 3

Sycamore Canyon Creek (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 4 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 4 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37046, Oxygen, Dissolved **Region 3**

Sycamore Canyon Creek (Monterey County)

LOE ID:	18235
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37046, Oxygen, Dissolved **Region 3**

Sycamore Canyon Creek (Monterey County)

LOE ID:	18236

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37047 Region 3

Sycamore Canyon Creek (Monterey County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 4 samples exceed the Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37047, Temperature, water **Region 3**

Sycamore Canyon Creek (Monterey County)

LOE ID:	18801
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37048 **Region 3**

Sycamore Canyon Creek (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed any of the water quality objectives, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37048, pH **Region 3**

Sycamore Canyon Creek (Monterey County)

LOE ID:	18965
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37048, pH **Region 3**

Sycamore Canyon Creek (Monterey County)

LOE ID:	18966
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37048, pH **Region 3**

Sycamore Canyon Creek (Monterey County)

LOE ID:	18963
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37048, pH **Region 3**

Sycamore Canyon Creek (Monterey County)

LOE ID:	18964
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37048, pH **Region 3**

Sycamore Canyon Creek (Monterey County)

LOE ID:	18967
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Sycamore Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Canyon Creek was collected at 1 monitoring site [308-SYCAM-31 - Sycamore Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Ynez River (above Lake Cachuma)**
Water Body ID: **CAR3145200020100825151948**
Water Body Type: **River & Stream**

DECISION ID **39481** **Region 3**
Santa Ynez River (above Lake Cachuma)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 29 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 29 samples exceed the water quality objective for unionized ammonia and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39481, Ammonia **Region 3**
Santa Ynez River (above Lake Cachuma)

LOE ID: 52500

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39481, Ammonia **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52184
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39481, Ammonia **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52538
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39481, Ammonia **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	9680
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39481, Ammonia **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	9679
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39481, Ammonia **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	9681
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52756 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The IBI score in this water body was 39 or lower and therefore is below the impairment threshold of the Southern California IBI. However, this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 52756, Benthic Community Effects Region 3

Santa Ynez River (above Lake Cachuma)

LOE ID:	58551

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was 39 or lower and therefore is below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 314SYPxxx-Santa Ynez River at Paradise Road
Temporal Representation:	Surveys done on April 16, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

DECISION ID 37312 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37312, Boron **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52158
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37312, Boron **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	9682

Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37364 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37364, Chloride **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	9695
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37364, Chloride **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52159
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39494** **Region 3**

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39494, Chlorophyll-a **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52185
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39494, Chlorophyll-a **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52539
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39494, Chlorophyll-a **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13158
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39494, Chlorophyll-a **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	9696
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39494, Chlorophyll-a **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	9697
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39494, Chlorophyll-a **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13157

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48827 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence are available in the administrative record to assess this pollutant. Zero of 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48827, Escherichia coli (E. coli) **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52520
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37337 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 27 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 0 of 27 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 27 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37337, Fecal Coliform Region 3

Santa Ynez River (above Lake Cachuma)

LOE ID:	52535
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37337, Fecal Coliform **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52519
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period

	exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37337, Fecal Coliform **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11527
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37337, Fecal Coliform **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11526
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37388 **Region 3**

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. The most recent 13 samples (collected in between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). One of the 13 samples exceed the evaluation guideline and there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. One of the 13 samples exceed the evaluation guideline and there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37388, Nitrate **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	9711
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37388, Nitrate **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	9698
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1

	monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37388, Nitrate **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52196
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37388, Nitrate — Region 3

Santa Ynez River (above Lake Cachuma)

LOE ID:	52554
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37388, Nitrate — Region 3

Santa Ynez River (above Lake Cachuma)

LOE ID:	52170
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37388, Nitrate **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52517
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37388, Nitrate **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52169
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37388, Nitrate **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52502
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37388, Nitrate **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52195
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37388, Nitrate **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52555
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53484 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 13 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53484, Nitrogen, Nitrite **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52171
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37328** **Region 3**

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Three of the 31 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 31 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 31 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 31 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52557
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52197
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52556
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52198
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13122
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13137
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13087
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for

	Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13123
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation: Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID: 13121

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat
Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation: Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID: 13103

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13086
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results

	are as follows: 1 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37328, Oxygen, Dissolved **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13102
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37266 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37266, Sodium Region 3

Santa Ynez River (above Lake Cachuma)

LOE ID:	9712
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37266, Sodium **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52183
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37198 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 31 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 31 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37198, Specific Conductivity Region 3

Santa Ynez River (above Lake Cachuma)

LOE ID:	52168
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37198, Specific Conductivity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11562
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37198, Specific Conductivity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11528
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when

	conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39250 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Four of the 31 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 2 of the 31 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 31 samples exceed the evaluation guideline for Cold Freshwater Habitat and 2 of the 31 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39250, Turbidity Region 3

Santa Ynez River (above Lake Cachuma)

LOE ID:	13140

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39250, Turbidity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13139
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39250, Turbidity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13119
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1

	monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39250, Turbidity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13105
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39250, Turbidity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52498
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39250, Turbidity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52574
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37941 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 31 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, Agricultural Supply, Drinking Water, and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 31 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, Agricultural Supply, Drinking Water, and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37941, pH Region 3

Santa Ynez River (above Lake Cachuma)

LOE ID:	52521
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52199
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52558
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52182
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52536
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	52518
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11564
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11566
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11529
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11288
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11289
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11565
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11543
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1

	monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11544
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11563

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11545
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11546
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37941, pH **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	11542
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37267 **Region 3**

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Seven of the 31 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This criteria is relevant for this water segment and for protection of steelhead trout / rainbow trout. According to the publication 'Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker and Reining, 2008), this segment [between Gilbralter and Bradbury dams) continues to be heavily stocked with rainbow trout for a put and take fishery and adult steelhead have been observed in this reach. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 31 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37267, Temperature, water — Region 3

Santa Ynez River (above Lake Cachuma)

LOE ID:	52499
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37267, Temperature, water **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13120
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]

Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37267, Temperature, water **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	13156
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39288 **Region 3**

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two water sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in water samples. Two of the four water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the four water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39288, Toxicity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	24737
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and

	results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39288, Toxicity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	24634
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39288, Toxicity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	24750
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39288, Toxicity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	24749
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples

	(collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39288, Toxicity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	58552
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Two of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count and Ceriodaphnia dubia young/female. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 314SYPxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39288, Toxicity **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	80355

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Two of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count and Ceriodaphnia dubia young/female. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 314SYPxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP was followed.
QAPP Information Reference(s):	

DECISION ID 42317 Region 3

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of zero

water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. The two samples collected will not be included in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect for the single sample. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005); results could not be quantified with the level of certainty required by the Listing Policy. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42317, Chlorpyrifos **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	16308
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42317, Chlorpyrifos **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	16309
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring

	includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42318 **Region 3**

Santa Ynez River (above Lake Cachuma)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42318, Diazinon **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	15881
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42318, Diazinon **Region 3**

Santa Ynez River (above Lake Cachuma)

LOE ID:	15882
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River(above Lake Cachuma) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River(above Lake Cachuma) was collected at 1 monitoring site [314SYP-Santa Ynez River at Paradise Road]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Casserly Creek**
Water Body ID: **CAR3051003020100816104231**
Water Body Type: **River & Stream**

DECISION ID **37696** **Region 3**
Casserly Creek

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for Cold or Warm Freshwater Habitat.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective for Cold or Warm Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37696, Oxygen, Dissolved **Region 3**
Casserly Creek

LOE ID: 17891

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Casserly Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Casserly Creek was collected at 1 monitoring site [CS-MMR]
Temporal Representation:	Data was collected on a single day 8/17/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37696, Oxygen, Dissolved **Region 3**

Casserly Creek

LOE ID:	17890
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Casserly Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Casserly Creek was collected at 1 monitoring site [CS-

	MMR]
Temporal Representation:	Data was collected on a single day 8/17/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37695 Region 3

Casserly Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37695, Temperature, water Region 3

Casserly Creek

LOE ID:	17433
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Casserly Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.

Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Casserly Creek was collected at 1 monitoring site [CS-MMR]
Temporal Representation:	Data was collected on a single day 8/17/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37658 Region 3
Casserly Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37658, Turbidity Region 3
Casserly Creek

LOE ID:	17617
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Casserly Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Casserly Creek was collected at 1 monitoring site [CS-MMR]
Temporal Representation:	Data was collected on a single day 8/17/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37658, Turbidity **Region 3**

Casserly Creek

LOE ID:	17618
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Casserly Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Casserly Creek was collected at 1 monitoring site [CS-MMR]
Temporal Representation:	Data was collected on a single day 8/17/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37840 Region 3

Casserly Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for Cold and Warm Freshwater Habitat, Non-Contact Recreation or Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives for Cold and Warm Freshwater Habitat, Non-Contact Recreation or Water Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37840, pH Region 3

Casserly Creek

LOE ID:	17430

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Casserly Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Casserly Creek was collected at 1 monitoring site [CS-MMR]
Temporal Representation:	Data was collected on a single day 8/17/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37840, pH **Region 3**

Casserly Creek

LOE ID:	17429
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Casserly Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Casserly Creek was collected at 1 monitoring site [CS-MMR]
Temporal Representation:	Data was collected on a single day 8/17/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37840, pH **Region 3**

Casserly Creek

LOE ID:	17427
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Casserly Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Casserly Creek was collected at 1 monitoring site [CS-MMR]
Temporal Representation:	Data was collected on a single day 8/17/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37840, pH **Region 3**

Casserly Creek

LOE ID:	17428
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Casserly Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Casserly Creek was collected at 1 monitoring site [CS-MMR]
Temporal Representation:	Data was collected on a single day 8/17/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Big Oak Creek (tributary to Towne Creek)**
Water Body ID: **CAR3097009020100816140558**
Water Body Type: **River & Stream**

DECISION ID **37178** **Region 3**
Big Oak Creek (tributary to Towne Creek)

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence isavailable in the administrative record to assess this pollutant. None of the 20 samples exceed the water quality objectives for either Agricultural Supply or Muncipal and Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceed the water quality objectives for either Agricultural Supply or Muncipal and Domestic Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37178, Nitrate **Region 3**
Big Oak Creek (tributary to Towne Creek)

LOE ID: 13730

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Big Oak Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Oak Creek was collected at 1 monitoring site [Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/7/2001-2/18/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Neary Lagoon mouth**
Water Body ID: **CAC304120532010071509591 9**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37914** **Region 3**
Pacific Ocean at Neary Lagoon mouth

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

The sample size for the geometric mean and single sample maximum criteria for fecal coliform (LOEs 20157 and 20158 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of 2 samples exceeded the geometric mean standard for fecal coliform (LOE 20157) and 0 of 6 samples exceeded the single sample maximum for fecal coliform (LOE 20158) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 2 samples exceeded the geometric mean standard for fecal coliform (LOE 20157) and 0 of 6 samples exceeded the single sample maximum for fecal coliform (LOE 20158) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37914, Fecal Coliform **Region 3**
Pacific Ocean at Neary Lagoon mouth

LOE ID:	20158
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Neary Lagoon mouth to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Neary Lagoon mouth was collected at one AB411 monitoring site (Neary Lagoon mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 4/13/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37914, Fecal Coliform **Region 3**

Pacific Ocean at Neary Lagoon mouth

LOE ID:	20157
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Neary Lagoon mouth to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Neary Lagoon mouth was collected at one AB411 monitoring site (Neary Lagoon mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 4/13/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Nearys Lake**
Water Body ID: **CAW304120532010082514144 9**
Water Body Type: **Lake & Reservoir**

DECISION ID **41079** **Region 3**
Nearys Lake

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41079, Escherichia coli (E. coli) **Region 3**
Nearys Lake

LOE ID: 19900

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 3/15/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41079, Escherichia coli (E. coli) **Region 3**

Nearys Lake

LOE ID:	19901
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 3/15/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41135 Region 3

Nearys Lake

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Municipal & Domestic Supply water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Municipal & Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41135, Nitrate Region 3

Nearys Lake

LOE ID:	19728
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41136**	**Region 3**
Nearys Lake		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Cold Freshwater habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

	3. The single sample did not exceed the Cold Freshwater habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41136, Oxygen, Dissolved **Region 3**

Nearys Lake

LOE ID:	19828
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41136, Oxygen, Dissolved **Region 3**

Nearys Lake

LOE ID:	19829
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41067**	**Region 3**
Nearys Lake		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold

Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41067, Temperature, water **Region 3**

Nearys Lake

LOE ID:	19229
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **41080** **Region 3**

Nearys Lake

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41080, Turbidity **Region 3**

Nearys Lake

LOE ID:	19444
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41080, Turbidity **Region 3**

Nearys Lake

LOE ID:	19443
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	42099	Region 3
Nearys Lake		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42099, pH	**Region 3**
Nearys Lake	

LOE ID:	19544
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42099, pH **Region 3**

Nearys Lake

LOE ID:	19548
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42099, pH **Region 3**

Nearys Lake

LOE ID:	19547
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42099, pH **Region 3**

Nearys Lake

LOE ID:	19546
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42099, pH **Region 3**

Nearys Lake

LOE ID:	19545
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nearys Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nearys Lake was collected at 1 monitoring site [304NRY_SCC - NEARY L at BAY-CA]
Temporal Representation:	Data was collected on a single day 10/16/2002.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **McGowan Ditch**
Water Body ID: **CAR3051003020100620223644**
Water Body Type: **River & Stream**

DECISION ID **48317** **Region 3**
McGowan Ditch

Pollutant: **Alachlor**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (National Recommended Water Quality Criteria (USEPA, 2006)) and drinking water (The California Maximum Contaminant Level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48317, Alachlor **Region 3**
McGowan Ditch

LOE ID: 55083

Pollutant: Alachlor
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48317, Alachlor **Region 3**

McGowan Ditch

LOE ID:	55077
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Alachlor is 0.002 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48317, Alachlor **Region 3**

McGowan Ditch

LOE ID:	55078
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48319** **Region 3**

McGowan Ditch

Pollutant:	**Atrazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48319, Atrazine **Region 3**

McGowan Ditch

LOE ID:	55086
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life 50% effect concentration (EC50) for Atrazine is 43 ug/L based on a 14 day toxicity study of Duckweed (Lemna gibba).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48319, Atrazine **Region 3**

McGowan Ditch

LOE ID:	55085
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life 50% effect concentration (EC50) for Atrazine is 43 ug/L based on a 14 day toxicity study of Duckweed (Lemna gibba).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48319, Atrazine **Region 3**

McGowan Ditch

LOE ID:	55084
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for atrazine is 0.001 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48350** **Region 3**

McGowan Ditch

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. One of the

three sediment sample exceed the evaluation guideline (Amweg and Weston (2007) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Note that none of the water sample results are used in the assessment because the results were reported a Â'non detectÂ' (or less than the reporting limit) but the laboratory reporting limit was above the evaluation guideline (Fojut et al. 2012). Therefore it is possible for the true concentration to be higher than the evaluation guideline but that cannot be determined.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the three sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48350, Bifenthrin **Region 3**

McGowan Ditch

LOE ID:	54966
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for BIFENTHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

	average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48350, Bifenthrin **Region 3**

McGowan Ditch

LOE ID:	54965
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48350, Bifenthrin **Region 3**

McGowan Ditch

LOE ID:	55087
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48350, Bifenthrin **Region 3**

McGowan Ditch

LOE ID:	54967
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for BIFENTHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48452**	**Region 3**
McGowan Ditch		

Pollutant:	**Butylate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 45 samples exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity Database). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 45 samples exceed the evaluation guideline and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48452, Butylate **Region 3**

McGowan Ditch

LOE ID:	54968
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48452, Butylate **Region 3**

McGowan Ditch

LOE ID:	54973
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48322**	**Region 3**
McGowan Ditch		

Pollutant:	**Carbaryl**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection and drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48322, Carbaryl **Region 3**

McGowan Ditch

LOE ID:	54976
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48322, Carbaryl **Region 3**

McGowan Ditch

LOE ID:	54974

Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for carbaryl is 40 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48322, Carbaryl **Region 3**

McGowan Ditch

LOE ID:	54975
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48323**	**Region 3**
McGowan Ditch		

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (USEPA National Recommended Water Quality Criteria) and drinking water (California Maximum Contaminant Level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48323, Carbofuran	**Region 3**

McGowan Ditch

LOE ID:	54977
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for carbofuran is 18 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48323, Carbofuran **Region 3**

McGowan Ditch

LOE ID:	54982
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48323, Carbofuran **Region 3**

McGowan Ditch

LOE ID:	54983
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the

	data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48331 Region 3
McGowan Ditch

Pollutant:	**Chlorothalonil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water (2006 USEPA Drinking Water Standards and Health Advisories). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48331, Chlorothalonil Region 3
McGowan Ditch

LOE ID:	54984
Pollutant:	Chlorothalonil
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorothalonil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the 2006 USEPA Drinking Water Standards and Health Advisories, the Ten-day Health Advisory for Chlorothalonil is 200 ug/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47448	Region 3
McGowan Ditch		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of nine water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000). Zero of nine samples exceeded the USEPA drinking water health advisory. Zero of three sediment samples exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47448, Chlorpyrifos **Region 3**

McGowan Ditch

LOE ID:	54985
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 47448, Chlorpyrifos **Region 3**

McGowan Ditch

LOE ID:	54993
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47448, Chlorpyrifos **Region 3**

McGowan Ditch

LOE ID:	54992
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for

	CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47448, Chlorpyrifos **Region 3**

McGowan Ditch

LOE ID:	54991
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47448, Chlorpyrifos **Region 3**

McGowan Ditch

LOE ID:	54990
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 48357 Region 3

McGowan Ditch

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment sample exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three sediment sample exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48357, Cyfluthrin — Region 3

McGowan Ditch

LOE ID:	54999
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48357, Cyfluthrin **Region 3**

McGowan Ditch

LOE ID:	54998
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 48354 Region 3

McGowan Ditch

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment sample exceed the evaluation guideline (Amweg and Weston (2007) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Note that none of the water sample results are used in the assessment because the results were reported a Â‘non detectÂ’ (or less than the reporting limit) but the laboratory reporting limit was above the evaluation guideline (Fojut et al. 2012). Therefore it is possible for the true concentration to be higher than the evaluation guideline but that cannot be determined. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48354, Cyhalothrin, Lambda Region 3

McGowan Ditch

LOE ID:	55001
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48354, Cyhalothrin, Lambda **Region 3**

McGowan Ditch

LOE ID:	55007
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use

	support and results are as follows: 0 of 0 samples exceed the criterion for Cyhalothrin, lambda, total. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48354, Cyhalothrin, Lambda **Region 3**

McGowan Ditch

LOE ID:	55006
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyhalothrin, lambda, total. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

	average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48354, Cyhalothrin, Lambda **Region 3**

McGowan Ditch

LOE ID:	55000
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	48355	Region 3
McGowan Ditch		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment sample exceed the evaluation guideline (Maund et al., 2002) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Note that none of the water sample results are used in the assessment because the results were reported a Â‘non detectÂ’ (or less than the reporting limit) but the laboratory reporting limit was above the evaluation guideline (Fojut et al. 2012). Therefore it is possible for the true concentration to be higher than the evaluation guideline but that cannot be determined. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48355, Cypermethrin	**Region 3**
McGowan Ditch	

LOE ID:	55009
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cypermethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48355, Cypermethrin **Region 3**

McGowan Ditch

LOE ID:	55015
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for CYPERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48355, Cypermethrin **Region 3**

McGowan Ditch

LOE ID:	55014
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for CYPERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP

	Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48355, Cypermethrin **Region 3**

McGowan Ditch

LOE ID:	55008
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cypermethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **48455** **Region 3**

McGowan Ditch

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eleven lines of evidence are available in the administrative record to assess this pollutant. The single water sample exceed the evaluation guideline (California Toxics Rule, 2000) and one of the six sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample exceed the evaluation guideline (California Toxics Rule, 2000) and one of the six sediment samples exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

McGowan Ditch

LOE ID:	55039
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT(p,p). Eight sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) Region 3

McGowan Ditch

LOE ID:	55060
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) Region 3

McGowan Ditch

LOE ID:	55041
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT(p,p). Eight sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) Region 3

McGowan Ditch

LOE ID:	55042
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) Region 3

McGowan Ditch

LOE ID:	55061
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDT, Total. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) Region 3

McGowan Ditch

LOE ID:	55062
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) Region 3

McGowan Ditch

LOE ID:	55040
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT(p,p). Eight sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

McGowan Ditch

LOE ID:	55050
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDT. Data

	assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) Region 3

McGowan Ditch

LOE ID:	55049
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) Region 3

McGowan Ditch

LOE ID:	55048
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDT. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48455, DDT (Dichlorodiphenyltrichloroethane) Region 3

McGowan Ditch

LOE ID:	55055

Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDT, Total. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**48457**	**Region 3**
McGowan Ditch		

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline (USEPA maximum acceptable toxicant

concentration (MATC)) and zero of the three sediment samples exceed the evaluation guideline (Amweg, E.L., et. Al., 2005) used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine water samples exceed the evaluation guideline and zero of the three sediment samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48457, Deltamethrin **Region 3**

McGowan Ditch

LOE ID:	55056
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.

Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48457, Deltamethrin **Region 3**

McGowan Ditch

LOE ID:	55057
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48457, Deltamethrin — Region 3

McGowan Ditch

LOE ID:	55051
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48457, Deltamethrin — Region 3

McGowan Ditch

LOE ID:	55058
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**47155**	**Region 3**
McGowan Ditch		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. One of the nine samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the nine samples exceed the USEPA drinking water health advisory. Zero out of three sediment samples did not exceed the aquatic life evaluation guideline (Ding et al. 2011). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of nine samples exceeded the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47155, Diazinon **Region 3**

McGowan Ditch

LOE ID:	55064
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr -

	305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 47155, Diazinon **Region 3**

McGowan Ditch

LOE ID:	55066
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47155, Diazinon **Region 3**

McGowan Ditch

LOE ID:	55059
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 47155, Diazinon **Region 3**

McGowan Ditch

LOE ID:	55067
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47155, Diazinon **Region 3**

McGowan Ditch

LOE ID:	55065
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48333** **Region 3**

McGowan Ditch

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level, 2011). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48333, Disulfoton — Region 3

McGowan Ditch

LOE ID:	55068
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DISULFOTON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48458**	**Region 3**
McGowan Ditch		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database) and zero of the three sediment samples exceed the evaluation guideline (Amweg, E.L., et. Al., 2005) used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine water samples exceed the evaluation guideline and zero of the three sediment samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48458, Esfenvalerate/Fenvalerate **Region 3**

McGowan Ditch

LOE ID:	55074
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48458, Esfenvalerate/Fenvalerate **Region 3**

McGowan Ditch

LOE ID:	55076
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48458, Esfenvalerate/Fenvalerate **Region 3**

McGowan Ditch

LOE ID:	55075
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48458, Esfenvalerate/Fenvalerate **Region 3**

McGowan Ditch

LOE ID:	55073
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48343	Region 3
McGowan Ditch		

Pollutant:	**Ethalfluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection (USEPA maximum acceptable toxicant concentration (MATC)). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48343, Ethalfluralin	**Region 3**
McGowan Ditch	

LOE ID:	55079
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for

	ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 1.4 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L as determined in a 50 day toxicity study with the Bluegill sunfish, Lepomis macrochirus. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48343, Ethalfluralin **Region 3**

McGowan Ditch

LOE ID:	55080
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration

	(MATC) of 0.7 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 1.4 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L as determined in a 50 day toxicity study with the Bluegill sunfish, Lepomis macrochirus. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48460**	**Region 3**
McGowan Ditch		

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline for aquatic life protection (USEPA Office of Pesticide Programs Ecotoxicity Database), and one of the three sediment samples exceed the evaluation guideline (Ding et al., 2011) used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine water samples exceed the evaluation guideline and one of the three sediment samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48460, Fenpropathrin **Region 3**

McGowan Ditch

LOE ID:	55081
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48460, Fenpropathrin **Region 3**

McGowan Ditch

LOE ID:	55082
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48460, Fenpropathrin **Region 3**

McGowan Ditch

LOE ID:	55089
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48460, Fenpropathrin **Region 3**

McGowan Ditch

LOE ID:	55088
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48461	Region 3
McGowan Ditch		

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment samples exceed the evaluation guideline for aquatic life protection (Maul et al. 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48461, Fipronil	**Region 3**
McGowan Ditch	

LOE ID:	55090
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48461, Fipronil **Region 3**

McGowan Ditch

LOE ID:	55091
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 48462 Region 3

McGowan Ditch

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment samples exceed the evaluation guideline for aquatic life protection (Maul et al. 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48462, Fipronil Sulfide Region 3

McGowan Ditch

LOE ID:	54969
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil sulfide.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48462, Fipronil Sulfide **Region 3**

McGowan Ditch

LOE ID:	54970
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil sulfide.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**48463**	**Region 3**
McGowan Ditch		

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment samples exceed the evaluation guideline for aquatic life protection (Maul et al. 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48463, Fipronil Sulfone **Region 3**

McGowan Ditch

LOE ID:	54972
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48463, Fipronil Sulfone **Region 3**

McGowan Ditch

LOE ID:	54971
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **48344** **Region 3**

McGowan Ditch

Pollutant:	**Hexazinone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the

nine samples exceed the evaluation guideline for aquatic life protection (USEPA Office of Pesticide Programs Ecotoxicity database). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48344, Hexazinone **Region 3**

McGowan Ditch

LOE ID:	54979
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L based on a 120 hour toxicity study of green algae (selenastrum capricornutum).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48344, Hexazinone **Region 3**

McGowan Ditch

LOE ID:	54978
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L based on a 120 hour toxicity study of green algae (selenastrum capricornutum).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48334** **Region 3**

McGowan Ditch

Pollutant:	**Iprodione**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water (USEPA IRIS reference dose). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48334, Iprodione **Region 3**

McGowan Ditch

LOE ID:	54980
Pollutant:	Iprodione
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Iprodione.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Iprodione is 280 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water with 0.04 mg/kg/day as the reference dose. An additional uncertainty factor of 10 is

	used for Class C carcinogens.
Guideline Reference:	IRIS Summary for Iprodione
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48325 Region 3

McGowan Ditch

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (maximum acceptable toxicant concentration (MATC), USEPA 1985) and drinking water (USEPA IRIS reference dose). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48325, Methidathion Region 3

McGowan Ditch

LOE ID:	54994
Pollutant:	Methidathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48325, Methidathion **Region 3**

McGowan Ditch

LOE ID:	54988
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48325, Methidathion **Region 3**

McGowan Ditch

LOE ID:	54989
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of

	Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48459 Region 3

McGowan Ditch

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline for aquatic life protection (CDFG, 1992), zero of the nine water samples exceed the evaluation guideline for drinking water (USEPA IRIS reference dose) and zero of the three sediment samples exceed the evaluation guideline (Ding et al., 2011) used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine water samples exceed the evaluation guidelines and zero of the three sediment samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48459, Methyl Parathion Region 3

McGowan Ditch

LOE ID:	54996
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48459, Methyl Parathion **Region 3**

McGowan Ditch

LOE ID:	54995
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phorate is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48459, Methyl Parathion **Region 3**

McGowan Ditch

LOE ID:	55003
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca.

	Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48459, Methyl Parathion **Region 3**

McGowan Ditch

LOE ID:	55002
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48459, Methyl Parathion **Region 3**

McGowan Ditch

LOE ID:	54997

Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48327**	**Region 3**
McGowan Ditch		

Pollutant:	**Molinate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (USEPA national ambient water quality criteria) and drinking water (California Maximum Contaminant Level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48327, Molinate **Region 3**

McGowan Ditch

LOE ID:	55005
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the

	data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48327, Molinate **Region 3**

McGowan Ditch

LOE ID:	55004
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for molinate is 20 ug/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48327, Molinate **Region 3**

McGowan Ditch

LOE ID:	55010
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48345**	**Region 3**
McGowan Ditch		

Pollutant:	**Napropamide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection (USEPA Office of Pesticide Programs Ecotoxicity database). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48345, Napropamide **Region 3**

McGowan Ditch

LOE ID:	55012
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48345, Napropamide **Region 3**

McGowan Ditch

LOE ID:	55011
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**42144**	**Region 3**
McGowan Ditch		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the nine samples exceed the water quality objective for dissolved oxygen in Cold Freshwater Habitats and zero of the nine samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the nine samples exceed the water quality objective for dissolved oxygen in Cold Freshwater Habitats and zero of the nine samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42144, Oxygen, Dissolved **Region 3**

McGowan Ditch

LOE ID:	47846
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr]
Temporal Representation:	Data was collected over the time period 1/6/2008 11:30:00 AM-10/28/2009 8:55:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42144, Oxygen, Dissolved **Region 3**

McGowan Ditch

LOE ID:	17875
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42144, Oxygen, Dissolved **Region 3**

McGowan Ditch

LOE ID:	17874
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42144, Oxygen, Dissolved **Region 3**

McGowan Ditch

LOE ID:	47845
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr]
Temporal Representation:	Data was collected over the time period 1/6/2008 11:30:00 AM-10/28/2009 8:55:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	48336	Region 3
McGowan Ditch		

Pollutant:	**Pentachlorobenzene (PCNB)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48336, Pentachlorobenzene (PCNB)	**Region 3**
McGowan Ditch	

LOE ID:	55013
Pollutant:	Pentachlorobenzene (PCNB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PCNB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services archived Advisory Level for Pentachloronitrobenzene is 20 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48356	Region 3
McGowan Ditch		

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment sample exceed the evaluation guideline (Amweg et al., 2005) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Note that none of the water sample results are used in the assessment because the results were reported a Â‘non detectÂ’ (or less than the reporting limit) but the laboratory reporting limit was above the evaluation guideline (Fojut et al. 2012). Therefore it is possible for the true concentration to be higher than the evaluation guideline but that cannot be determined. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48356, Permethrin, total **Region 3**

McGowan Ditch

LOE ID:	55021
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for PERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48356, Permethrin, total **Region 3**

McGowan Ditch

LOE ID:	55020

Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for PERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48356, Permethrin, total **Region 3**

McGowan Ditch

LOE ID:	55018
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48356, Permethrin, total **Region 3**

McGowan Ditch

LOE ID:	55019
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 48326 Region 3

McGowan Ditch

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (USEPA Office of Pesticide Programs Ecotoxicity database) and drinking water (USEPA IRIS reference dose). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48326, Phosmet Region 3

McGowan Ditch

LOE ID:	55028

Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48326, Phosmet **Region 3**

McGowan Ditch

LOE ID:	55026
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48326, Phosmet **Region 3**

McGowan Ditch

LOE ID:	55027
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP

format.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48328	Region 3
McGowan Ditch		

Pollutant:	**Prometryn**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (USEPA Office of Pesticide Programs Ecotoxicity database) and drinking water (USEPA IRIS reference dose). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48328, Prometryn	**Region 3**
McGowan Ditch	

LOE ID:	55035
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use

	support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for prometryn is 28 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48328, Prometryn **Region 3**

McGowan Ditch

LOE ID:	55029
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr -

	305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48328, Prometryn **Region 3**

McGowan Ditch

LOE ID:	55030
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48346** **Region 3**

McGowan Ditch

Pollutant:	**Propanil (DCPA mono- and di-acid degrad)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection (USEPA maximum acceptable toxicant concentration (MATC)). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48346, Propanil (DCPA mono- and di-acid degrad) **Region 3**

McGowan Ditch

LOE ID:	55036
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section

	F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.6 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L, as determined in a 60 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48346, Propanil (DCPA mono- and di-acid degrad) Region 3

McGowan Ditch

LOE ID:	55037
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.6 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L, as determined in a 60 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48347 Region 3

McGowan Ditch

Pollutant:	**Propiconazole**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection (USEPA Office of Pesticide Programs Ecotoxicity Database). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48347, Propiconazole Region 3

McGowan Ditch

LOE ID:	55038
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L) based on a 96 toxicity study of Rainbow trout (Oncorhynchus mykiss).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48347, Propiconazole **Region 3**

McGowan Ditch

LOE ID:	55043
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L) based on a 96 toxicity study of Rainbow trout (Oncorhynchus mykiss).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [

	Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48339 Region 3

McGowan Ditch

Pollutant:	**Resmethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water (USEPA IRIS reference dose). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48339, Resmethrin Region 3

McGowan Ditch

LOE ID:	55044
Pollutant:	Resmethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for RESMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Resmethrin is 210 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48329**	**Region 3**
McGowan Ditch		

Pollutant:	**Simazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (USEPA USEPA national ambient water quality criteria) and drinking water (California Maximum Contaminant Level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48329, Simazine **Region 3**

McGowan Ditch

LOE ID:	55045
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for simazine is 0.004 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48329, Simazine **Region 3**

McGowan Ditch

LOE ID:	55047
Pollutant:	Simazine

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48329, Simazine **Region 3**

McGowan Ditch

LOE ID:	55046
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**42145**	**Region 3**
McGowan Ditch		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42145, Temperature, water	**Region 3**

McGowan Ditch

LOE ID:	47863
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr]
Temporal Representation:	Data was collected over the time period 1/6/2008 11:30:00 AM-10/28/2009 8:55:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42145, Temperature, water **Region 3**

McGowan Ditch

LOE ID:	17418
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as

	follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**48330**	**Region 3**
McGowan Ditch		

Pollutant:	**Thiobencarb/Bolero**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (maximum acceptable toxicant concentration (MATC)) and drinking water (The California Maximum Contaminant Level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48330, Thiobencarb/Bolero **Region 3**

McGowan Ditch

LOE ID:	55053
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.0 ug/L and the no observed effect concentration (NOEC) of 1.0 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48330, Thiobencarb/Bolero **Region 3**

McGowan Ditch

LOE ID:	55054
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.0 ug/L and the no observed effect concentration (NOEC) of 1.0 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48330, Thiobencarb/Bolero **Region 3**

McGowan Ditch

LOE ID:	55052
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for thiobencarb is 0.07 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48348 Region 3

McGowan Ditch

Pollutant:	**Trifluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection (USEPA maximum acceptable toxicant concentration (MATC)). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48348, Trifluralin Region 3

McGowan Ditch

LOE ID:	55071
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.18 ug/L and the no observed effect concentration (NOEC) of 1.14 ug/L as determined in a 48 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48348, Trifluralin **Region 3**

McGowan Ditch

LOE ID:	55070
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.18 ug/L and the no observed effect concentration (NOEC) of 1.14 ug/L as determined in a 48 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48340**	**Region 3**
McGowan Ditch		

Pollutant:	**Vinclozolin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water (USEPA IRIS reference dose). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48340, Vinclozolin **Region 3**
McGowan Ditch

LOE ID:	55072
Pollutant:	Vinclozolin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Vinclozolin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Vinclozolin is 180 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **42188** **Region 3**
McGowan Ditch

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Three of the 11 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and two of the 11 samples exceed the water quality objectives for Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 11 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and two of the 11 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	17393
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	17392
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	17391
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	17672
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	17671
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	47862
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr]
Temporal Representation:	Data was collected over the time period 1/6/2008 11:30:00 AM-10/28/2009 8:55:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	47861
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr]
Temporal Representation:	Data was collected over the time period 1/6/2008 11:30:00 AM-10/28/2009 8:55:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	47860
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr]
Temporal Representation:	Data was collected over the time period 1/6/2008 11:30:00 AM-10/28/2009 8:55:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	47859
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr]
Temporal Representation:	Data was collected over the time period 1/6/2008 11:30:00 AM-10/28/2009 8:55:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42188, pH **Region 3**

McGowan Ditch

LOE ID:	47858
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr]
Temporal Representation:	Data was collected over the time period 1/6/2008 11:30:00 AM-10/28/2009 8:55:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	48453	Region 3
McGowan Ditch		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Three of the three water samples exceed the evaluation guideline (California Toxics Rule, 2000). In addition, three of the six sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life. Three of the sediment samples were tested for toxic effects to invertebrate test organisms and two of the three samples did result in a significant toxic effect. This water segment is also on the 303(d) List for toxicity in sediment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the three water samples exceed the evaluation guideline (California Toxics Rule, 2000), three of the six sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life and two of the three samples did result in a significant toxic effect. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48453, DDD (Dichlorodiphenyldichloroethane) **Region 3**

McGowan Ditch

LOE ID:	55017
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48453, DDD (Dichlorodiphenyldichloroethane) **Region 3**

McGowan Ditch

LOE ID:	55022
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDD. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48453, DDD (Dichlorodiphenyldichloroethane) Region 3

McGowan Ditch

LOE ID:	55023
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48453, DDD (Dichlorodiphenyldichloroethane) Region 3

McGowan Ditch

LOE ID:	55069
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in samples collected on 7/2/2008, and 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at McGowan Ditch station 305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowan Rd and Bluff Dr.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48453, DDD (Dichlorodiphenyldichloroethane) Region 3

McGowan Ditch

LOE ID:	55024
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDD. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48453, DDD (Dichlorodiphenyldichloroethane) **Region 3**

McGowan Ditch

LOE ID:	55016
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use

	support and results are as follows: 3 of 3 samples exceed the criterion for DDD(p,p). Six sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00083 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48454**	**Region 3**
McGowan Ditch		

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Nine of the nine water samples exceed the evaluation guideline (California Toxics Rule, 2000). In addition, four of the six sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life. Three of the sediment samples were tested for toxic effects to invertebrate test organisms and two of the three samples did result in a significant toxic effect. This water segment is also on the 303(d) List for toxicity in sediment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the nine water samples exceed the evaluation guideline (California Toxics Rule, 2000), four

of the six sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life and two of the three samples did result in a significant toxic effect. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48454, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

McGowan Ditch

LOE ID:	55034
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for DDE. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48454, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

McGowan Ditch

LOE ID:	55031

Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48454, DDE (Dichlorodiphenyldichloroethylene) Region 3

McGowan Ditch

LOE ID:	55069
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in samples collected on 7/2/2008, and 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at McGowan Ditch station 305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowan Rd and Bluff Dr.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48454, DDE (Dichlorodiphenyldichloroethylene) Region 3

McGowan Ditch

LOE ID:	55033
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [

	Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48454, DDE (Dichlorodiphenyldichloroethylene) Region 3

McGowan Ditch

LOE ID:	55032
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for DDE. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48454, DDE (Dichlorodiphenyldichloroethylene) Region 3

McGowan Ditch

LOE ID:	55025
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for DDE(p,p). Zero sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDE(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48465**	**Region 3**
McGowan Ditch		

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory) but two of the two samples exceed the evaluation guideline for aquatic life uses (Fojut, T.L., et al., 2012). Note, seven of the nine samples are not included in the LOEs for Cold and Warm freshwater habitats because the results were Â“non-detectÂ” but the laboratory reporting limit was above the evaluation guideline. Therefore staff are unable to determine if the guideline was exceeded. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the two samples exceed the evaluation guideline for aquatic life uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48465, Malathion **Region 3**

McGowan Ditch

LOE ID:	54987
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for MALATHION. Seven sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48465, Malathion **Region 3**

McGowan Ditch

LOE ID:	54981
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48465, Malathion **Region 3**

McGowan Ditch

LOE ID:	54986
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for MALATHION. Seven sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 1 monitoring site [Monterey Drainage Ditch - trib to Pajaro River between McGowean Rd and Bluff Dr - 305MDD]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48456**	**Region 3**
McGowan Ditch		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in water samples. Zero of the two water samples resulted in a significant toxic effect to one or more test organisms.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 sediment samples and 2 of the 9 water samples exceed the water quality objective for aquatic life protection and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48456, Toxicity **Region 3**

McGowan Ditch

LOE ID:	55069
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in samples collected on 7/2/2008, and 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at McGowan Ditch station 305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowan Rd and Bluff Dr.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48456, Toxicity **Region 3**

McGowan Ditch

LOE ID:	55063
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Two of the nine sample exhibited significant toxicity. The toxicity tests included survival of Hyalella azteca and survival of Ceriodaphnia dubia. Statistically significant effects to both Hyalella azteca and Ceriodaphnia dubia were observed in one sample, collected on 10/14/2009 and significant effects to Ceriodaphnia dubia were observed in the sample collected on 2/16/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowan Rd and Bluff Dr.
Temporal Representation:	The samples were collected between January 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48456, Toxicity **Region 3**

McGowan Ditch

LOE ID:	79214
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9

Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Two of the nine sample exhibited significant toxicity. The toxicity tests included survival of Hyalella azteca and survival of Ceriodaphnia dubia. Statistically significant effects to both Hyalella azteca and Ceriodaphnia dubia were observed in one sample, collected on 10/14/2009 and significant effects to Ceriodaphnia dubia were observed in the sample collected on 2/16/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowan Rd and Bluff Dr.
Temporal Representation:	The samples were collected between January 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48456, Toxicity **Region 3**

McGowan Ditch

LOE ID:	79215
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in samples collected on 7/2/2008, and 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at McGowan Ditch station 305MDD - Monterey Drainage Ditch - trib to Pajaro River between McGowan Rd and Bluff Dr.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	42185	Region 3
McGowan Ditch		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. The pollutant name was changed from Â‘Nitrogen, ammonia (Total Ammonia)' to Â‘AmmoniaÂ’ in the 2014 assessment cycle. One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42185, Ammonia **Region 3**

McGowan Ditch

LOE ID:	17832
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **42143** **Region 3**

McGowan Ditch

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Both of the 2 samples exceeded the water quality objective for Municipal and Domestic Supply and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42143, Nitrate **Region 3**

McGowan Ditch

LOE ID:	17727
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for McGowan Ditch to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McGowan Ditch was collected at 2 monitoring sites [MG-MCI MG-TRA - McGowan Ditch at Trafton]
Temporal Representation:	Data was collected over the time period 2/7/2006-11/14/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **McEnery Spring**
Water Body ID: **CAR3041204120100620215953**
Water Body Type: **River & Stream**

DECISION ID **42238** **Region 3**
McEnery Spring

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 27 samples exceed the Municipal & Domestic Supply water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 27 samples exceed the Municipal & Domestic Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42238, Nitrate **Region 3**
McEnery Spring

LOE ID: 19940

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 27
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for McEnery Spring to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McEnery Spring was collected at 1 monitoring site [304MCR_SCC - MCENERY ROAD SPRING (Trib to Zayante Creek)]
Temporal Representation:	Data was collected over the time period 4/15/1999-10/14/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**42189**	**Region 3**
McEnery Spring		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the water quality objectives for dissolved oxygen in Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the water quality objectives and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42189, Oxygen, Dissolved **Region 3**

McEnery Spring

LOE ID:	19747
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for McEnery Spring to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McEnery Spring was collected at 1 monitoring site [304MCR_SCC - MCENERY ROAD SPRING (Trib to Zayante Creek)]
Temporal Representation:	Data was collected over the time period 4/15/1999-10/14/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42189, Oxygen, Dissolved **Region 3**

McEnery Spring

LOE ID:	19748
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for McEnery Spring to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McEnery Spring was collected at 1 monitoring site [304MCR_SCC - MCENERY ROAD SPRING (Trib to Zayante Creek)]
Temporal Representation:	Data was collected over the time period 4/15/1999-10/14/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	42200	Region 3
McEnery Spring		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedences supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 27 samples exceeded the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42200, Temperature, water **Region 3**

McEnery Spring

LOE ID:	19598
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for McEnery Spring to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for McEnery Spring was collected at 1 monitoring site [304MCR_SCC - MCENERY ROAD SPRING (Trib to Zayante Creek)]
Temporal Representation:	Data was collected over the time period 4/15/1999-10/14/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	42239	Region 3
McEnery Spring		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Five lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of 27 samples exceeded the water quality objectives for Cold and Warm Freshwater Habitat and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42239, pH	**Region 3**
McEnery Spring	

LOE ID:	19656
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for McEnery Spring to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McEnery Spring was collected at 1 monitoring site [304MCR_SCC - MCENERY ROAD SPRING (Trib to Zayante Creek)]
Temporal Representation:	Data was collected over the time period 4/15/1999-10/14/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42239, pH **Region 3**

McEnery Spring

LOE ID:	19657
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for McEnery Spring to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McEnery Spring was collected at 1 monitoring site [304MCR_SCC - MCENERY ROAD SPRING (Trib to Zayante Creek)]

Temporal Representation:	Data was collected over the time period 4/15/1999-10/14/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42239, pH **Region 3**

McEnery Spring

LOE ID:	19655
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for McEnery Spring to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McEnery Spring was collected at 1 monitoring site [304MCR_SCC - MCENERY ROAD SPRING (Trib to Zayante Creek)]
Temporal Representation:	Data was collected over the time period 4/15/1999-10/14/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42239, pH **Region 3**

McEnery Spring

LOE ID:	19654
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for McEnery Spring to determine beneficial use support and results are as follows: 8 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McEnery Spring was collected at 1 monitoring site [304MCR_SCC - MCENERY ROAD SPRING (Trib to Zayante Creek)]
Temporal Representation:	Data was collected over the time period 4/15/1999-10/14/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42239, pH **Region 3**

McEnery Spring

LOE ID:	19672
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for McEnery Spring to determine beneficial use support and results are as follows: 8 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McEnery Spring was collected at 1 monitoring site [304MCR_SCC - MCENERY ROAD SPRING (Trib to Zayante Creek)]
Temporal Representation:	Data was collected over the time period 4/15/1999-10/14/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Intel Creek**
Water Body ID: **CAR3041205320100816164832**
Water Body Type: **River & Stream**

DECISION ID **40686** **Region 3**
Intel Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40686, Nitrate **Region 3**
Intel Creek

LOE ID: 19630

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]
Temporal Representation:	Data was collected over the time period 10/20/1999-11/13/2000.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**40718**	**Region 3**
Intel Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess these pollutants. Both of the two samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat. One of the two samples exceed the dissolved oxygen water quality objective for Warm Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Both of the two samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat. One of the two samples exceed the dissolved oxygen water quality objective for Warm Freshwater Habitat. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40718, Oxygen, Dissolved **Region 3**

Intel Creek

LOE ID:	19808
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]
Temporal Representation:	Data was collected over the time period 10/20/1999-10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40718, Oxygen, Dissolved **Region 3**

Intel Creek

LOE ID:	19807
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]
Temporal Representation:	Data was collected over the time period 10/20/1999-10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **40550** **Region 3**

Intel Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40550, Temperature, water **Region 3**

Intel Creek

LOE ID:	19200
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]
Temporal Representation:	Data was collected over the time period 10/20/1999-10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to

protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	40475	Region 3
Intel Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40475, Turbidity	**Region 3**
Intel Creek	

LOE ID:	19440
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-

	2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40475, Turbidity **Region 3**

Intel Creek

LOE ID:	19417
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]

Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **40570** **Region 3**

Intel Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeds the Cold or Warm Freshwater Habitat water quality objective, the Municipal & Domestic Supply objective, the Non-Contact Recreation objective or the Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeds the Cold or Warm Freshwater Habitat water quality objective, the Municipal & Domestic Supply objective, the Non-Contact Recreation objective or the Water Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40570, pH **Region 3**

Intel Creek

LOE ID:	19467
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]
Temporal Representation:	Data was collected over the time period 10/20/1999-10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40570, pH **Region 3**

Intel Creek

LOE ID:	19466
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]

Temporal Representation:	Data was collected over the time period 10/20/1999-10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40570, pH **Region 3**

Intel Creek

LOE ID:	19490
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]
Temporal Representation:	Data was collected over the time period 10/20/1999-10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40570, pH **Region 3**

Intel Creek

LOE ID:	19489
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]
Temporal Representation:	Data was collected over the time period 10/20/1999-10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40570, pH **Region 3**

Intel Creek

LOE ID:	19491
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Intel Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Intel Creek was collected at 1 monitoring site [304INT_SCC - INTEL C at MOUTH]
Temporal Representation:	Data was collected over the time period 10/20/1999-10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Corcoran Lagoon**
Water Body ID: **CAW304130142010081617112 3**
Water Body Type: **Wetland, Freshwater**

DECISION ID **38698** **Region 3**
Corcoran Lagoon

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 8 samples exceed the Water Contact Recreation objectivea; 2 of 8 samples exceed the Non-Contact Recreation objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 8 samples exceed the Water Contact Recreation objectivea; 2 of 8 samples exceed the Non-Contact Recreation objective. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38698, Escherichia coli (E. coli) **Region 3**
Corcoran Lagoon

LOE ID: 18336

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 2 monitoring sites [304-CORCO-21 - Corcoran Lagoon At small bridge on East Cliff, 304-CORCO-22 - Corcoran Lagoon at Live Oak Library]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38698, Escherichia coli (E. coli) Region 3

Corcoran Lagoon

LOE ID:	18335
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 2 monitoring sites [304-CORCO-21 - Corcoran Lagoon At small bridge on East Cliff, 304-CORCO-22 - Corcoran Lagoon at Live Oak Library]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38698, Escherichia coli (E. coli) **Region 3**

Corcoran Lagoon

LOE ID:	19863
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [304COM_SCC - CORCORAN L at MOUTH]
Temporal Representation:	Data was collected over the time period 5/21/2003-3/15/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38698, Escherichia coli (E. coli) **Region 3**

Corcoran Lagoon

LOE ID:	19864

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [304COM_SCC - CORCORAN L at MOUTH]
Temporal Representation:	Data was collected over the time period 5/21/2003-3/15/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	38407	Region 3
Corcoran Lagoon		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 14 samples exceed the water quality objective for Warm Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 14 samples exceed the water quality objective for Warm Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38407, Oxygen, Dissolved **Region 3**

Corcoran Lagoon

LOE ID:	19729
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [304COM_SCC - CORCORAN L at MOUTH]
Temporal Representation:	Data was collected over the time period 10/10/2001-10/30/2001.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38407, Oxygen, Dissolved **Region 3**

Corcoran Lagoon

LOE ID:	18199
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 2 monitoring sites [304-CORCO-22 - Corcoran Lagoon at Live Oak Library, 304-CORCO-21 - Corcoran Lagoon At small bridge on East Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38407, Oxygen, Dissolved **Region 3**

Corcoran Lagoon

LOE ID:	17893
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 2 monitoring sites [RG-E - South end 21st Ave Live Oak beach, RG-E2 - East Cliff south bridge]
Temporal Representation:	Data was collected over the time period 3/12/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**38425**	**Region 3**
Corcoran Lagoon		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 5 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 5 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples

is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38425, Turbidity **Region 3**

Corcoran Lagoon

LOE ID:	17616
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 2 monitoring sites [RG-E - South end 21st Ave Live Oak beach, RG-E2 - East Cliff south bridge]
Temporal Representation:	Data was collected over the time period 1/27/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38614** **Region 3**

Corcoran Lagoon

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Seven of the 8 samples exceed the water quality objective for Shellfish Harvest, and this supports rejection of the null hypothesis. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 8 samples exceed the water quality objective for Shellfish Harvest and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38614, Total Coliform **Region 3**

Corcoran Lagoon

LOE ID:	17458
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period

	shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 2 monitoring sites [304-CORCO-21 - Corcoran Lagoon At small bridge on East Cliff, 304-CORCO-22 - Corcoran Lagoon at Live Oak Library]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38614, Total Coliform **Region 3**

Corcoran Lagoon

LOE ID:	19763
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [304COM_SCC - CORCORAN L at MOUTH]
Temporal Representation:	Data was collected over the time period 5/21/2003-5/2/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	38859	Region 3
Corcoran Lagoon		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Nine lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Seven of the 21 samples exceed the objectives for Warm Freshwater Habitat, Water Contact Recreation and Non-Contact Recreation. This supports rejection of the null hypothesis. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 21 samples exceed the objectives for Warm Freshwater Habitat, Water Contact Recreation and Non-Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded. However the elevated pH may be a result of the geology in the watershed and not a result of a controllable source.

Line of Evidence (LOE) for Decision ID 38859, pH	**Region 3**
Corcoran Lagoon	

LOE ID:	17668
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [RG-E2 - East Cliff south bridge]
Temporal Representation:	Data was collected over the time period 1/20/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38859, pH **Region 3**

Corcoran Lagoon

LOE ID:	17669
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [RG-E2 - East Cliff south bridge]
Temporal Representation: Data was collected over the time period 1/20/2006-5/11/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38859, pH **Region 3**
Corcoran Lagoon

LOE ID: 19848

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996
Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [304COM_SCC - CORCORAN L at MOUTH]
Temporal Representation: Data was collected over the time period 10/10/2001-10/30/2001.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38859, pH **Region 3**
Corcoran Lagoon

LOE ID: 19847

Pollutant: pH
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [304COM_SCC - CORCORAN L at MOUTH]
Temporal Representation:	Data was collected over the time period 10/10/2001-10/30/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38859, pH **Region 3**

Corcoran Lagoon

LOE ID:	19164
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 2 monitoring sites [304-CORCO-22 - Corcoran Lagoon at Live Oak Library, 304-CORCO-21 - Corcoran Lagoon At small bridge on East Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38859, pH **Region 3**

Corcoran Lagoon

LOE ID:	19165
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 2 monitoring sites [304-CORCO-22 - Corcoran Lagoon at Live Oak Library, 304-CORCO-21 - Corcoran Lagoon At small bridge on East Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38859, pH **Region 3**

Corcoran Lagoon

LOE ID:	17670
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [RG-E2 - East Cliff south bridge]
Temporal Representation:	Data was collected over the time period 1/20/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38859, pH **Region 3**

Corcoran Lagoon

LOE ID:	19849
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-

	1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 1 monitoring site [304COM_SCC - CORCORAN L at MOUTH]
Temporal Representation:	Data was collected over the time period 10/10/2001-10/30/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38859, pH **Region 3**

Corcoran Lagoon

LOE ID:	19166
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corcoran Lagoon to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corcoran Lagoon was collected at 2 monitoring sites [304-CORCO-22 - Corcoran Lagoon at Live Oak Library, 304-CORCO-21 - Corcoran Lagoon At small bridge on East Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Waddell Creek Beach**
Water Body ID: **CAC304200132010042721410 0**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38965** **Region 3**
Pacific Ocean at Waddell Creek Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 57 samples exceeded the single sample maximum for enterococcus (LOEs 20117 and 56396) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 57 samples exceeded the single sample maximum for enterococcus (LOEs 20117 and 56396) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38965, Enterococcus **Region 3**
Pacific Ocean at Waddell Creek Beach

LOE ID: 56396

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Waddell Creek Beach to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Waddell Creek Beach was collected at 1 monitoring site [Waddell Creek Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38965, Enterococcus **Region 3**

Pacific Ocean at Waddell Creek Beach

LOE ID:	20117
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Waddell Creek Beach to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Waddell Creek Beach was collected at one AB411 monitoring site (Waddell Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38391 **Region 3**

Pacific Ocean at Waddell Creek Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 52 samples exceeded the single sample maximum for fecal coliform (LOEs 20115 and 56397) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 52 samples exceeded the single sample maximum for fecal coliform (LOEs 20115 and 56397) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38391, Fecal Coliform **Region 3**

Pacific Ocean at Waddell Creek Beach

LOE ID:	20115
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Waddell Creek Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Waddell Creek Beach was collected at one AB411 monitoring site (Waddell Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38391, Fecal Coliform **Region 3**

Pacific Ocean at Waddell Creek Beach

LOE ID:	56397
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Waddell Creek Beach and results are as follows: 0 of 33 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Waddell Creek Beach was collected at 1 monitoring site [Waddell Creek Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 38508 **Region 3**

Pacific Ocean at Waddell Creek Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the fecal coliform/total coliform ratio criteria (LOE 20122) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Six of 33 samples (LOE 56398) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 57 samples exceeded the single sample maximum for total coliform (LOEs 20120 and 56399), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20122) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 33 samples (LOE 56398) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38508, Total Coliform **Region 3**

Pacific Ocean at Waddell Creek Beach

LOE ID:	56398
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	33
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Waddell Creek Beach to determine beneficial use support and results are as follows: 6 of 33 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Waddell Creek Beach was collected at 1 monitoring site [Waddell Creek Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38508, Total Coliform **Region 3**

Pacific Ocean at Waddell Creek Beach

LOE ID:	56399
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Waddell Creek Beach to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Waddell Creek Beach was collected at 1 monitoring site [Waddell Creek Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38508, Total Coliform **Region 3**

Pacific Ocean at Waddell Creek Beach

LOE ID:	20122
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Waddell Creek Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Waddell Creek Beach was collected at one monitoring site (Waddell Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38508, Total Coliform **Region 3**

Pacific Ocean at Waddell Creek Beach

LOE ID:	20120
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Waddell Creek Beach to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Waddell Creek Beach was collected at one monitoring site (Waddell Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38964 Region 3

Pacific Ocean at Waddell Creek Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the single sample maximum criteria for Escherichia coli (E. coli) (LOE 20119) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported

using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20119) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20119) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38964, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Waddell Creek Beach

LOE ID:	20119
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Waddell Creek Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Waddell Creek Beach was collected at one AB411 monitoring site (Waddell Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information: QA information not available
QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Toro Beach**
Water Body ID: **CAC310180102010062215164 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **41978** **Region 3**
Pacific Ocean at Toro Beach

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41978, Chlorpyrifos **Region 3**
Pacific Ocean at Toro Beach

LOE ID: 14857

Pollutant: Chlorpyrifos

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Chlorpyrifos is 10,000 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41978, Chlorpyrifos **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14873
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Chlorpyrifos is 10000.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID	**41979**	**Region 3**
Pacific Ocean at Toro Beach		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41979, Diazinon **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14893
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Diazinon is 300 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41979, Diazinon **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14894
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Diazinon is 300.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID	**42564**	**Region 3**
Pacific Ocean at Toro Beach		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42564, Dieldrin **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14915
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Dieldrin is 2.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data

	submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42564, Dieldrin **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14914
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Dieldrin is 2.0 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID **42603** **Region 3**

Pacific Ocean at Toro Beach

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42603, Endosulfan **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14933
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endosulfan I.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment

Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Endoculfan is 20000.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID	42604	Region 3
Pacific Ocean at Toro Beach		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42604, Endrin **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14953
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Policy For Developing California's Clean Water Act Section 303(d) List. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency.
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Endrin is 1,000 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42604, Endrin **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14954
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Endrin is 1000.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID	**42614**	**Region 3**
Pacific Ocean at Toro Beach		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42614, Heptachlor epoxide **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14974
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Heptachlor epoxide.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Heptachlor Epoxide is 4.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42614, Heptachlor epoxide **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14973
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Heptachlor epoxide.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Total Heptachlor Epoxide is 4.0 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID	**42606**	**Region 3**
Pacific Ocean at Toro Beach		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42606, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14994
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Hexachlorobenzene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Total Hexachlorobenzene is 20 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42606, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	14995
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Hexachlorobenzene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Hexachlorobenzene is 20.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 42607 **Region 3**

Pacific Ocean at Toro Beach

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42607, Mirex **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	15014
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Mirex.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Policy For Developing California's Clean Water Act Section 303(d) List. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency.
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the EPA screening value for Mirex is 800 ug/Kg wet weight (USEPA 2000)
Guideline Reference:	Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42607, Mirex **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	15015
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Mirex.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Recommended Screening Values for target analytes - recreational fishers (Table 5-3 in USEPA 2000 (page 5-11)).
Objective/Criterion Reference:	Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA
Evaluation Guideline:	USEPA Screening Value in fish and shellfish tissue for Mirex is 800.0 ug/Kg
Guideline Reference:	Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring

	sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 42432 **Region 3**

Pacific Ocean at Toro Beach

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42432, PCBs (Polychlorinated biphenyls) **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	15730
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for PCB congener 195.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Total PCBs is 20.0 ppb 9ug/Kg or ng/g)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 locations, considered by the Listing Policy as a single monitoring sites, because they are less than 200m apart. [SCS02OOTB001 - Toro Beach at toro creek mouth, SCS02OOTB002 - Toro Beach at Toro Creek mouth south, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID **42617** **Region 3**

Pacific Ocean at Toro Beach

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of six sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42617, Toxaphene **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	15798
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxaphene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for total Toxaphene is 30 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river,

	SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42617, Toxaphene **Region 3**

Pacific Ocean at Toro Beach

LOE ID:	15799
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Toro Beach to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxaphene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Toxaphene is 30.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Toro Beach was collected at 6 monitoring sites [SCS02OOTB001 - Toro Beach at river, SCS02OOTB002 - Toro Beach at river, SCS02OOTB003 - Toro Beach 100W of river, SCS02OOTB004 - Toro Beach 100W of river, SCS02OOTB005 - Toro Beach 100E of river, SCS02OOTB006 - Toro Beach 100E of river]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Sunset Beach**
Water Body ID: **CAC305100302010042710455 4**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38942** **Region 3**
Pacific Ocean at Sunset Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of 67 samples exceeded the single sample maximum for enterococcus (LOEs 20042 and 56481) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 67 samples exceeded the single sample maximum for enterococcus (LOEs 20042 and 56481) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38942, Enterococcus **Region 3**
Pacific Ocean at Sunset Beach

LOE ID: 20042

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Beach to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Beach was collected at one AB411 monitoring site (Sunset Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38942, Enterococcus **Region 3**

Pacific Ocean at Sunset Beach

LOE ID:	56481
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Sunset Beach to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Beach was collected at 1 monitoring site [Sunset Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 38857 Region 3

Pacific Ocean at Sunset Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 62 samples exceeded the single sample maximum for fecal coliform (LOEs 20040 and 56482) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005 Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 62 samples exceeded the single sample maximum for fecal coliform (LOEs 20040 and 56482) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38857, Fecal Coliform Region 3

Pacific Ocean at Sunset Beach

LOE ID:	20040
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Beach to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Beach was collected at one AB411 monitoring site (Sunset Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38857, Fecal Coliform **Region 3**

Pacific Ocean at Sunset Beach

LOE ID:	56482
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Sunset Beach and results are as follows: 0 of 42 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Beach was collected at 1 monitoring site [Sunset Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID **38651** **Region 3**

Pacific Ocean at Sunset Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the coliform/total coliform ratio criteria (LOE 20055) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Two of 42 samples (LOE 56483) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 67 samples exceeded the single sample maximum for total coliform (LOEs 20053 and 56484), and 0 of 20 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20055) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 42 samples (LOE 56483) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 67 samples exceeded the single sample maximum for total coliform (LOEs 20053 and 56484), and 0 of 20 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20055) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38651, Total Coliform **Region 3**

Pacific Ocean at Sunset Beach

LOE ID:	56483
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	42
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Sunset Beach to determine beneficial use support and results are as follows: 2 of 42 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Beach was collected at 1 monitoring site [Sunset Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38651, Total Coliform **Region 3**

Pacific Ocean at Sunset Beach

LOE ID:	56484
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Sunset Beach to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Beach was collected at 1 monitoring site [Sunset Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38651, Total Coliform **Region 3**

Pacific Ocean at Sunset Beach

LOE ID:	20053
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Beach to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Beach was collected at one monitoring site (Sunset Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38651, Total Coliform **Region 3**

Pacific Ocean at Sunset Beach

LOE ID:	20055
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Beach to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Beach was collected at one monitoring site (Sunset Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID **39051** **Region 3**

Pacific Ocean at Sunset Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the single sample maximum criteria for Escherichia coli (E. coli) (LOE 20052) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20052) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20052) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39051, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Sunset Beach

LOE ID:	20052
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Beach was collected at one AB411 monitoring site (Sunset Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information: QA information not available
QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Sunny Cove Beach**
Water Body ID: **CAC304130142010042710354 0**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38410** **Region 3**
Pacific Ocean at Sunny Cove Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of 63 samples exceeded the single sample maximum for enterococcus (LOEs 20025 and 56471) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 63 samples exceeded the single sample maximum for enterococcus (LOEs 20025 and 56471) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38410, Enterococcus **Region 3**
Pacific Ocean at Sunny Cove Beach

LOE ID: 56471

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Sunny Cove Beach to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at 1 monitoring site [Sunny Cove Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38410, Enterococcus **Region 3**

Pacific Ocean at Sunny Cove Beach

LOE ID:	20025
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunny Cove Beach to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at one AB411 monitoring site (Sunny Cove Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38538 — Region 3

Pacific Ocean at Sunny Cove Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of 57 samples exceeded the single sample maximum for fecal coliform (LOEs 20023 and 56472) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 57 samples exceeded the single sample maximum for fecal coliform (LOEs 20023 and 56472) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38538, Fecal Coliform — Region 3

Pacific Ocean at Sunny Cove Beach

LOE ID:	20023
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunny Cove Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at one AB411 monitoring site (Sunny Cove Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38538, Fecal Coliform **Region 3**

Pacific Ocean at Sunny Cove Beach

LOE ID:	56472
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Sunny Cove Beach and results are as follows: 1 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at 1 monitoring site [Sunny Cove Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 38553 Region 3

Pacific Ocean at Sunny Cove Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the fecal coliform/total coliform ratio criteria (LOE 20038) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Three of 36 samples (LOE 56479) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 62 samples exceeded the single sample maximum for total coliform (LOEs 20036 and 56480), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20038) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 36 samples (LOE 56479) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 62 samples exceeded the single sample maximum for total coliform (LOEs 20036 and 56480), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20038) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38553, Total Coliform Region 3

Pacific Ocean at Sunny Cove Beach

LOE ID:	56480
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Sunny Cove Beach to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at 1 monitoring site [Sunny Cove Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38553, Total Coliform **Region 3**

Pacific Ocean at Sunny Cove Beach

LOE ID:	56479
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	36
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Sunny Cove Beach to determine beneficial use support and results are as follows: 3 of 36 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at 1 monitoring site [Sunny Cove Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38553, Total Coliform **Region 3**

Pacific Ocean at Sunny Cove Beach

LOE ID:	20036
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunny Cove Beach to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at one monitoring site (Sunny Cove Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38553, Total Coliform **Region 3**

Pacific Ocean at Sunny Cove Beach

LOE ID:	20038
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunny Cove Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at one monitoring site (Sunny Cove Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38996 Region 3

Pacific Ocean at Sunny Cove Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 20034 and 20035 respectively) is insufficient to determine, with the power and confidence

of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20034) and 0 of 2 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20035) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20034) and 0 of 2 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20035) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38996, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Sunny Cove Beach

LOE ID:	20034
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunny Cove Beach to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at one

	AB411 monitoring site (Sunny Cove Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38996, Escherichia coli (E. coli) Region 3

Pacific Ocean at Sunny Cove Beach

LOE ID:	20035
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunny Cove Beach to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunny Cove Beach was collected at one AB411 monitoring site (Sunny Cove Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Summerland Beach**
Water Body ID: **CAC315330112010042710221 6**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **39072** **Region 3**
Pacific Ocean at Summerland Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 134 samples exceeded the geometric mean standard for enterococcus (LOEs 20017 and 56461) and 9 of 173 samples exceeded the single sample maximum for enterococcus (LOEs 20018 and 56460) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 134 samples exceeded the geometric mean standard for enterococcus (LOEs 20017 and 56461) and 9 of 173 samples exceeded the single sample maximum for enterococcus (LOEs 20018 and 56460) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39072, Enterococcus **Region 3**
Pacific Ocean at Summerland Beach

LOE ID: 20017

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at one AB411 monitoring site (Summerland Beach)
Temporal Representation:	Data was collected over the time period 5/22/2006 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39072, Enterococcus **Region 3**

Pacific Ocean at Summerland Beach

LOE ID:	20018
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 3 of 35 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at one AB411 monitoring site (Summerland Beach)
Temporal Representation: Data was collected over the time period 5/22/2006 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39072, Enterococcus **Region 3**

Pacific Ocean at Summerland Beach

LOE ID: 56460

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138
Number of Exceedances: 6

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 6 of 138 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at 1 monitoring site [Summerland Beach]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39072, Enterococcus **Region 3**

Pacific Ocean at Summerland Beach

LOE ID: 56461

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 126 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Summerland Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37826 Region 3

Pacific Ocean at Summerland Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 132 samples exceeded the geometric mean standard for fecal coliform (LOEs 20007 and 56467) and 1 of 171 samples exceeded the single sample maximum for fecal coliform (LOEs 20008 and 56462) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 132 samples exceeded the geometric mean standard for fecal coliform (LOEs 20007 and 56467) and 1 of 171 samples exceeded the single sample maximum for fecal coliform (LOEs 20008 and 56462) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37826, Fecal Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID:	56467
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	124
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 124 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Summerland Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37826, Fecal Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID:	56462
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan

	single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Summerland Beach and results are as follows: 1 of 137 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at 1 monitoring site [Summerland Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37826, Fecal Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID:	20008
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at one AB411 monitoring site (Summerland Beach)
Temporal Representation:	Data was collected over the time period 5/22/2006 - 12/27/2006. This includes weekly

	AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37826, Fecal Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID:	20007
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at one AB411 monitoring site (Summerland Beach)
Temporal Representation:	Data was collected over the time period 5/22/2006 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37839 **Region 3**

Pacific Ocean at Summerland Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Ten of 138 samples (LOE 56468) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 134 samples exceeded the geometric mean standard for total coliform (LOEs 20020 and 56470), 0 of 173 samples exceeded the single sample maximum for total coliform (LOEs 20019 and 56469), and 0 of 134 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20021) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 138 samples (LOE 56468) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 134 samples exceeded the geometric mean standard for total coliform (LOEs 20020 and 56470), 0 of 173 samples exceeded the single sample maximum for total coliform (LOEs 20019 and 56469), and 0 of 134 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20021) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37839, Total Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID:	20019
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at one monitoring site (Summerland Beach)
Temporal Representation: Data was collected over the time period 5/22/2006 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37839, Total Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID: 20020

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at one monitoring site (Summerland Beach)
Temporal Representation: Data was collected over the time period 5/22/2006 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37839, Total Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID: 20021

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at one monitoring site (Summerland Beach)
Temporal Representation:	Data was collected over the time period 5/22/2006 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37839, Total Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID:	56470
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 126 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Summerland Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37839, Total Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID:	56469
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 0 of 138 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at 1 monitoring site [Summerland Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37839, Total Coliform **Region 3**

Pacific Ocean at Summerland Beach

LOE ID:	56468
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	138
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Summerland Beach to determine beneficial use support and results are as follows: 10 of 138 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Summerland Beach was collected at 1 monitoring site [Summerland Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive**
Water Body ID: **CAC310240212010040417214 5**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37849** **Region 3**
Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of 36 samples exceeded the geometric mean standard for enterococcus (LOE 19967) and 7 of 78 samples exceeded the single sample maximum for enterococcus (LOE 19968) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 36 samples exceeded the geometric mean standard for enterococcus (LOE 19967) and 7 of 78 samples exceeded the single sample maximum for enterococcus (LOE 19968) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37849, Enterococcus **Region 3**
Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

LOE ID: 19967

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sewers (San Luis Obispo) Silver Shoals Drive to determine beneficial use support and results are as follows: 3 of 36 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sewers (San Luis Obispo County) was collected at one AB411 monitoring site (SEW7)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 6/13/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37849, Enterococcus **Region 3**

Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

LOE ID:	19968
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	78
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sewers (San Luis Obispo) Silver Shoals Drive to determine beneficial use support and results are as follows: 4 of 78 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

	Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sewers (San Luis Obispo County) was collected at one AB411 monitoring site (SEW7)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 6/13/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37851 Region 3

Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of 36 samples exceeded the geometric mean standard for fecal coliform (LOE 19965) and 0 of 77 samples exceeded the single sample maximum for fecal coliform (LOE 19966) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 36 samples exceeded the geometric mean standard for fecal coliform (LOE 19965) and 0 of 77 samples exceeded the single sample maximum for fecal coliform (LOE 19966) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37851, Fecal Coliform Region 3

Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

LOE ID:	19965

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sewers (San Luis Obispo) Silver Shoals Drive to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sewers (San Luis Obispo County) was collected at one AB411 monitoring site (SEW7)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 6/13/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37851, Fecal Coliform **Region 3**

Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

LOE ID:	19966
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	77
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sewers (San Luis Obispo) Silver Shoals Drive to determine beneficial use support and results are as follows: 0 of 77 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sewers (San Luis Obispo County) was collected at one AB411 monitoring site (SEW7)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 6/13/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37699 Region 3

Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Two of 36 samples exceeded the geometric mean standard for total coliform (LOE 19970), 1 of 77 samples exceeded the single sample maximum for total coliform (LOE 19969), and 0 of 77 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19971) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 36 samples exceeded the geometric mean standard for total coliform (LOE 19970), 1 of 77 samples exceeded the single sample maximum for total coliform (LOE 19969), and 0 of 77 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19971) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37699, Total Coliform Region 3

Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

LOE ID:	19969
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	77
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sewers (San Luis Obispo) Silver Shoals Drive to determine beneficial use support and results are as follows: 1 of 77 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sewers (San Luis Obispo County) was collected at one monitoring site (SEW7)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 6/13/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37699, Total Coliform **Region 3**

Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

LOE ID:	19970
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sewers (San Luis Obispo) Silver Shoals Drive to determine beneficial use support and results are as follows: 2 of 36 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005

	AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sewers (San Luis Obispo County) was collected at one monitoring site (SEW7)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 6/13/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37699, Total Coliform **Region 3**

Pacific Ocean at Sewers (San Luis Obispo), Silver Shoals Drive

LOE ID:	19971
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	77
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sewers (San Luis Obispo) Silver Shoals Drive to determine beneficial use support and results are as follows: 0 of 77 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sewers (San Luis Obispo County) was collected at one monitoring site (SEW7)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 6/13/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Seacliff State Beach**
Water Body ID: **CAC304130222010042615341 4**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37734** **Region 3**
Pacific Ocean at Seacliff State Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of 191 samples exceeded the geometric mean standard for enterococcus (LOEs 19950 and 56437) and 7 of 292 samples exceeded the single sample maximum for enterococcus (LOEs 19951 and 56436) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 191 samples exceeded the geometric mean standard for enterococcus (LOEs 19950 and 56437) and 7 of 292 samples exceeded the single sample maximum for enterococcus (LOEs 19951 and 56436) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37734, Enterococcus **Region 3**
Pacific Ocean at Seacliff State Beach

LOE ID: 56437

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	165
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 165 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Seacliff Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37734, Enterococcus **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	56436
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	182
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 6 of 182 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at 1 monitoring site [Seacliff Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37734, Enterococcus **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	19951
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 1 of 110 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at one AB411 monitoring site (Seacliff Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37734, Enterococcus **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	19950
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at one AB411 monitoring site (Seacliff Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37975 Region 3

Pacific Ocean at Seacliff State Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 185 samples exceeded the geometric mean standard for fecal coliform (LOEs 20222 and 56439) and 5 of 267 samples exceeded the single sample maximum for fecal coliform (LOEs 19949 and 56438) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 185 samples exceeded the geometric mean standard for fecal coliform (LOEs 20222 and 56439) and 5 of 267 samples exceeded the single sample maximum for fecal coliform (LOEs 19949 and 56438) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37975, Fecal Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	19949
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	86
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 0 of 86 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at one AB411 monitoring site (Seacliff Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37975, Fecal Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	20222
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at one AB411 monitoring site (Seacliff Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37975, Fecal Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	56438
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	181
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Seacliff State Beach and results are as follows: 5 of 181 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at 1 monitoring site [Seacliff Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37975, Fecal Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	56439
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	164
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 164 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Seacliff Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38257 **Region 3**

Pacific Ocean at Seacliff State Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Twenty two of 180 samples (LOE 56440) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 189 samples exceeded the geometric mean standard for total coliform (LOEs 19955 and 56442), 1 of 290 samples exceeded the single sample maximum for total coliform (LOEs 19954 and 56441), and 0 of 86 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19956) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty two of 180 samples (LOE 56440) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 189 samples exceeded the geometric mean standard for total coliform (LOEs 19955 and 56442), 1 of 290 samples exceeded the single sample maximum for total coliform (LOEs 19954 and 56441), and 0 of 86 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19956) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38257, Total Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	56442
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	163
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 163 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Seacliff Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38257, Total Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID: 56440

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 180
Number of Exceedances: 22

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 22 of 180 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at 1 monitoring site [Seacliff Beach]
Temporal Representation: Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38257, Total Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID: 56441

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 180
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Seacliff State Beach to determine

	beneficial use support and results are as follows: 1 of 180 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at 1 monitoring site [Seacliff Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38257, Total Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	19956
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	86
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 0 of 86 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at one monitoring site (Seacliff Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411

	monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38257, Total Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	19954
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 0 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at one monitoring site (Seacliff Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38257, Total Coliform **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	19955
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at one monitoring site (Seacliff Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38292 Region 3

Pacific Ocean at Seacliff State Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 19952 and 19953 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19952) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19953) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19952) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19953) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38292, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	19953
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at one AB411 monitoring site (Seacliff Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38292, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Seacliff State Beach

LOE ID:	19952
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seacliff State Beach to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seacliff State Beach was collected at one AB411 monitoring site (Seacliff Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Seabright (Castle) Beach**
Water Body ID: **CAC304120532010042615265 5**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38155** **Region 3**
Pacific Ocean at Seabright (Castle) Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Ten of 165 samples exceeded the geometric mean standard for enterococcus (LOEs 20215 and 56430) and 17 of 266 samples exceeded the single sample maximum for enterococcus (LOEs 20216 and 56429) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 165 samples exceeded the geometric mean standard for enterococcus (LOEs 20215 and 56430) and 17 of 266 samples exceeded the single sample maximum for enterococcus (LOEs 20216 and 56429) for the water contact recreation water quality standard and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38155, Enterococcus **Region 3**
Pacific Ocean at Seabright (Castle) Beach

LOE ID: 20215

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at one AB411 monitoring site (Seabright Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38155, Enterococcus **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	20216
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	111
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 5 of 111 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at one AB411 monitoring site (Seabright Beach)
Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38155, Enterococcus **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID: 56429

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 155
Number of Exceedances: 12

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 12 of 155 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at 1 monitoring site [Seabright Beach]
Temporal Representation: Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38155, Enterococcus **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID: 56430

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the 139 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Seabright Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38140 Region 3

Pacific Ocean at Seabright (Castle) Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 160 samples exceeded the geometric mean standard for fecal coliform (LOEs 20204 and 56432) and 7 of 244 samples exceeded the single sample maximum for fecal coliform (LOEs 20205 and 56431) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 160 samples exceeded the geometric mean standard for fecal coliform (LOEs 20204 and 56432) and 7 of 244 samples exceeded the single sample maximum for fecal coliform (LOEs 20205 and 56431) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38140, Fecal Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	20204
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at one AB411 monitoring site (Seabright Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38140, Fecal Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	20205
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89

Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 3 of 89 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at one AB411 monitoring site (Seabright Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38140, Fecal Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	56432
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 139 geomeans exceeded the objective. Zero of the 139 geomeans exceeded the fecal coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Seabright Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38140, Fecal Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	56431
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Seabright (Castle) Beach and results are as follows: 4 of 155 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at 1 monitoring site [Seabright Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID **38368** **Region 3**

Pacific Ocean at Seabright (Castle) Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Forty six of 155 samples (LOE 56433) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Three of 165 samples exceeded the geometric mean standard for total coliform (LOEs 20220 and 56435), 5 of 268 samples exceeded the single sample maximum for total coliform (LOEs 20219 and 56434), and 0 of 89 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20221) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty six of 155 samples (LOE 56433) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38368, Total Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	56433
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	155
Number of Exceedances:	46
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 46 of 155 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at 1 monitoring site [Seabright Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38368, Total Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	56434
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 2 of 155 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at 1 monitoring site [Seabright Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38368, Total Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	56435
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	139
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 139 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Seabright Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38368, Total Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	20220
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at one monitoring site (Seabright Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38368, Total Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	20221
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 0 of 89 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at one monitoring site (Seabright Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38368, Total Coliform **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	20219
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	113
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 3 of 113 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at one monitoring site (Seabright Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID	38139	Region 3
Pacific Ocean at Seabright (Castle) Beach		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 20217 and 20218 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20217) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20218) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20217) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20218) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38139, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	20218
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at one AB411 monitoring site (Seabright Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38139, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Seabright (Castle) Beach

LOE ID:	20217
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Seabright (Castle) Beach to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Seabright (Castle) Beach was collected at one AB411 monitoring site (Seabright Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Scott Creek Beach**
Water Body ID: **CAC304110222010042615164 9**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38535** **Region 3**
Pacific Ocean at Scott Creek Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 56 samples exceeded the single sample maximum for enterococcus (LOEs 20198 and 56425) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 56 samples exceeded the single sample maximum for enterococcus (LOEs 20198 and 56425) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38535, Enterococcus **Region 3**
Pacific Ocean at Scott Creek Beach

LOE ID: 56425

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Scott Creek Beach to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Scott Creek Beach was collected at 1 monitoring site [Scott Creek Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38535, Enterococcus **Region 3**

Pacific Ocean at Scott Creek Beach

LOE ID:	20198
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Scott Creek Beach to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Scott Creek Beach was collected at one AB411 monitoring site (Scott Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38536 **Region 3**

Pacific Ocean at Scott Creek Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of 50 samples exceeded the single sample maximum for fecal coliform (LOEs 20188 and 56426) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 50 samples exceeded the single sample maximum for fecal coliform (LOEs 20188 and 56426) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38536, Fecal Coliform **Region 3**

Pacific Ocean at Scott Creek Beach

LOE ID:	20188
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Scott Creek Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Scott Creek Beach was collected at one AB411 monitoring site (Scott Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38536, Fecal Coliform **Region 3**

Pacific Ocean at Scott Creek Beach

LOE ID:	56426
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Scott Creek Beach and results are as follows: 1 of 31 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Scott Creek Beach was collected at 1 monitoring site [Scott Creek Beach]
Temporal Representation:	Data was collected over the time period 2/26/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 38199 Region 3

Pacific Ocean at Scott Creek Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the fecal coliform/total coliform criteria (LOE 20203) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. One of 32 samples (LOE 56427) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 56 samples exceeded the single sample maximum for total coliform (LOEs 20201 and 56428), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20203) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 32 samples (LOE 56427) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 56 samples exceeded the single sample maximum for total coliform (LOEs 20201 and 56428), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20203) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38199, Total Coliform Region 3

Pacific Ocean at Scott Creek Beach

LOE ID:	56428
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Scott Creek Beach to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Scott Creek Beach was collected at 1 monitoring site [Scott Creek Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38199, Total Coliform **Region 3**

Pacific Ocean at Scott Creek Beach

LOE ID:	56427
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Scott Creek Beach to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Scott Creek Beach was collected at 1 monitoring site [Scott Creek Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38199, Total Coliform **Region 3**

Pacific Ocean at Scott Creek Beach

LOE ID:	20201
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Scott Creek Beach to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Scott Creek Beach was collected at one monitoring site (Scott Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38199, Total Coliform **Region 3**

Pacific Ocean at Scott Creek Beach

LOE ID:	20203
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Scott Creek Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Scott Creek Beach was collected at one monitoring site (Scott Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38571 Region 3

Pacific Ocean at Scott Creek Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the single sample maximum criteria for Escherichia coli (E. coli) (LOE 20200) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20200) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20200) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38571, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Scott Creek Beach

LOE ID:	20200
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Scott Creek Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Scott Creek Beach was collected at one AB411 monitoring site (Scott Creek Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at San Vicente Beach (Davenport)**
Water Body ID: **CAC304110232010041818440 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37742** **Region 3**
Pacific Ocean at San Vicente Beach (Davenport)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 56 samples exceeded the single sample maximum for enterococcus (LOEs 19992 and 56414) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 56 samples exceeded the single sample maximum for enterococcus (LOEs 19992 and 56414) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37742, Enterococcus **Region 3**
Pacific Ocean at San Vicente Beach (Davenport)

LOE ID: 19992

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Vicente Beach (Davenport) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Vicente Beach was collected at one AB411 monitoring site (San Vicente Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37742, Enterococcus **Region 3**

Pacific Ocean at San Vicente Beach (Davenport)

LOE ID:	56414
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at San Vicente Beach (Davenport) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Vicente Beach (Davenport) was collected at 1 monitoring site [San Vicente Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 38361 Region 3

Pacific Ocean at San Vicente Beach (Davenport)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 51 samples exceeded the single sample maximum for fecal coliform (LOEs 19981 and 56415) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 51 samples exceeded the single sample maximum for fecal coliform (LOEs 19981 and 56415) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38361, Fecal Coliform Region 3

Pacific Ocean at San Vicente Beach (Davenport)

LOE ID:	19981
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Vicente Beach (Davenport) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Vicente Beach was collected at one AB411 monitoring site (San Vicente Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38361, Fecal Coliform **Region 3**

Pacific Ocean at San Vicente Beach (Davenport)

LOE ID:	56415
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at San Vicente Beach (Davenport) and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Vicente Beach (Davenport) was collected at 1 monitoring site [San Vicente Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37654 Region 3

Pacific Ocean at San Vicente Beach (Davenport)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size the fecal coliform/total coliform ratio criteria (LOE 19997) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Three of 32 samples (LOE 56416) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 56 samples exceeded the single sample maximum for total coliform (LOEs 19995 and 56417), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19997) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 32 samples (LOE 56416) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 56 samples exceeded the single sample maximum for total coliform (LOEs 19995 and 56417), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19997) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37654, Total Coliform Region 3

Pacific Ocean at San Vicente Beach (Davenport)

LOE ID:	56417
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at San Vicente Beach (Davenport) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Vicente Beach (Davenport) was collected at 1 monitoring site [San Vicente Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37654, Total Coliform **Region 3**

Pacific Ocean at San Vicente Beach (Davenport)

LOE ID:	56416
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at San Vicente Beach (Davenport) to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Vicente Beach (Davenport) was collected at 1 monitoring site [San Vicente Beach]
Temporal Representation:	Data was collected over the time period 1/23/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37654, Total Coliform **Region 3**

Pacific Ocean at San Vicente Beach (Davenport)

LOE ID:	19997
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Vicente Beach (Davenport) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Vicente Beach was collected at one monitoring site (San Vicente Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37654, Total Coliform **Region 3**

Pacific Ocean at San Vicente Beach (Davenport)

LOE ID:	19995
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Vicente Beach (Davenport) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Vicente Beach was collected at one monitoring site (San Vicente Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37704 Region 3

Pacific Ocean at San Vicente Beach (Davenport)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the single sample maximum criteria for Escherichia coli (E. coli) (LOE 19994) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported

using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19994) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19994) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37704, Escherichia coli (E. coli) Region 3

Pacific Ocean at San Vicente Beach (Davenport)

LOE ID:	19994
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Vicente Beach (Davenport) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Vicente Beach was collected at one AB411 monitoring site (San Vicente Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information: QA information not available
QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at San Simeon Beach (Pico Ave)**
Water Body ID: **CAC310130202010041818311 6**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37750** **Region 3**
Pacific Ocean at San Simeon Beach (Pico Ave)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Eleven of 200 samples exceeded the geometric mean standard for enterococcus (LOEs 20169 and 56408) and 9 of 273 samples exceeded the single sample maximum for enterococcus (LOEs 19976 and 56407) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 200 samples exceeded the geometric mean standard for enterococcus (LOEs 20169 and 56408) and 9 of 273 samples exceeded the single sample maximum for enterococcus (LOEs 19976 and 56407) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37750, Enterococcus **Region 3**
Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID: 56407

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	190
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 6 of 190 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach (Pico Ave) was collected at 1 monitoring site [PICO23]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37750, Enterococcus **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	56408
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	181
Number of Exceedances:	11
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eleven of the 181 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1862, PICO23.

Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37750, Enterococcus **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	19976
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	83
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 3 of 83 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach was collected at one AB411 monitoring site (PICO23)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37750, Enterococcus **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	20169
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach was collected at one AB411 monitoring site (PICO23)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38342 Region 3

Pacific Ocean at San Simeon Beach (Pico Ave)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 195 samples exceeded the geometric mean standard for fecal coliform (LOEs 20167 and 56410) and 1 of 267 samples exceeded the single sample maximum for fecal coliform (LOEs 20168 and 56409) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 195 samples exceeded the geometric mean standard for fecal coliform (LOEs 20167 and 56410) and 1 of 267 samples exceeded the single sample maximum for fecal coliform (LOEs 20168 and 56409) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38342, Fecal Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	20168
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	81
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 0 of 81 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach was collected at one AB411 monitoring site (PICO23)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38342, Fecal Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	20167
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach was collected at one AB411 monitoring site (PICO23)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38342, Fecal Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	56410
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	176
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 176 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1862 PICO23.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38342, Fecal Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	56409
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	186
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at San Simeon Beach (Pico Ave) and results are as follows: 1 of 186 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach (Pico Ave) was collected at 1 monitoring site [PICO23]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37680 **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Ten of 187 samples (LOE 56411) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 197 samples exceeded the geometric mean standard for total coliform (LOEs 19978 and 56413), 0 of 268 samples exceeded the single sample maximum for total coliform (LOEs 19977 and 56412), and 0 of 81 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19979) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 187 samples (LOE 56411) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 197 samples exceeded the geometric mean standard for total coliform (LOEs 19978 and 56413), 0 of 268 samples exceeded the single sample maximum for total coliform (LOEs 19977 and 56412), and 0 of 81 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19979) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37680, Total Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	56411
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	187
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 10 of 187 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach (Pico Ave) was collected at 1 monitoring site [PICO23]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37680, Total Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	56413
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	178
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 178 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from ststion 1862 PICO23.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37680, Total Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	56412
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	187
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 0 of 187 samples exceed the criterion for Coliform, Total.

Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach (Pico Ave) was collected at 1 monitoring site [PICO23]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37680, Total Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	19979
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	81
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 0 of 81 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach was collected at one monitoring site (PICO23)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37680, Total Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	19977
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	81
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 0 of 81 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach was collected at one monitoring site (PICO23)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37680, Total Coliform **Region 3**

Pacific Ocean at San Simeon Beach (Pico Ave)

LOE ID:	19978
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Simeon Beach (Pico Ave) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Simeon Beach was collected at one monitoring site (PICO23)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at San Carlos Beach (Monterey County)**
Water Body ID: **CAC309500422010062215385 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38253** **Region 3**
Pacific Ocean at San Carlos Beach (Monterey County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One of 112 samples exceeded the geometric mean standard for enterococcus (LOEs 20151 and 56401) and 5 of 184 samples exceeded the single sample maximum for enterococcus (LOEs 20152 and 56400) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 112 samples exceeded the geometric mean standard for enterococcus (LOEs 20151 and 56401) and 5 of 184 samples exceeded the single sample maximum for enterococcus (LOEs 20152 and 56400) for the water contact recreation water quality standard and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38253, Enterococcus **Region 3**
Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID: 20151

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach was collected at one AB411 monitoring site (San Carlos Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38253, Enterococcus **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	20152
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 4 of 61 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at San Carlos Beach was collected at one AB411 monitoring site (San Carlos Beach)
Temporal Representation: Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38253, Enterococcus **Region 3**
Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID: 56401

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 96
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 96 geomeans exceeded the entercoccus objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from San Carlos Beach.
Temporal Representation: Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38253, Enterococcus **Region 3**
Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID: 56400

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 123
Number of Exceedances: 1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 1 of 123 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach (Monterey County) was collected at 1 monitoring site [San Carlos Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 38254 Region 3

Pacific Ocean at San Carlos Beach (Monterey County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 112 samples exceeded the geometric mean standard for fecal coliform (LOEs 20149 and 56403) and 2 of 183 samples exceeded the single sample maximum for fecal coliform (LOEs 20150 and 56402) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 112 samples exceeded the geometric mean standard for fecal coliform (LOEs 20149 and 56403) and 2 of 183 samples exceeded the single sample maximum for fecal coliform (LOEs 20150 and 56402) for the water contact recreation water quality standard and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38254, Fecal Coliform **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	20149
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach was collected at one AB411 monitoring site (San Carlos Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38254, Fecal Coliform **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	20150
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 1 of 60 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach was collected at one AB411 monitoring site (San Carlos Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38254, Fecal Coliform **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	56403
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 96 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Carlos Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	

QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38254, Fecal Coliform **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	56402
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	123
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at San Carlos Beach (Monterey County) and results are as follows: 1 of 123 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach (Monterey County) was collected at 1 monitoring site [San Carlos Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37946 **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Five of 123 samples (LOE 56404) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 112 samples exceeded the geometric mean standard for total coliform (LOEs 20165 and 56406), 0 of 184 samples exceeded the single sample maximum for total coliform (LOEs 20155 and 56405), and 0 of 60 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20166) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 123 samples (LOE 56404) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 112 samples exceeded the geometric mean standard for total coliform (LOEs 20165 and 56406), 0 of 184 samples exceeded the single sample maximum for total coliform (LOEs 20155 and 56405), and 0 of 60 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20166) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37946, Total Coliform **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	56404
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	123
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 5 of 123 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach (Monterey County) was

	collected at 1 monitoring site [San Carlos Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37946, Total Coliform **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	56405
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	123
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 0 of 123 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach (Monterey County) was collected at 1 monitoring site [San Carlos Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37946, Total Coliform **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	56406
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 96 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from San Carlos Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37946, Total Coliform **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	20155
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach was collected at one monitoring site (San Carlos Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37946, Total Coliform — Region 3

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	20166
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach was collected at one monitoring site (San Carlos Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37946, Total Coliform — Region 3

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	20165
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Carlos Beach

	(Monterey County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach was collected at one monitoring site (San Carlos Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38439 Region 3

Pacific Ocean at San Carlos Beach (Monterey County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 20153 and 20154 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Two of 4 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20153) and 1 of 4 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20154) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 4 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20153)

and 1 of 4 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20154) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38439, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	20154
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach was collected at one AB411 monitoring site (San Carlos Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38439, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at San Carlos Beach (Monterey County)

LOE ID:	20153
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at San Carlos Beach (Monterey County) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at San Carlos Beach was collected at one AB411 monitoring site (San Carlos Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach**
Water Body ID: **CAC304130232010041818160 9**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38329** **Region 3**
Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of 66 samples exceeded the single sample maximum for enterococcus (LOEs 19401 and 56502) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 66 samples exceeded the single sample maximum for enterococcus (LOEs 19401 and 56502) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38329, Enterococcus **Region 3**
Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID: 56502

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach was collected at 1 monitoring site [Hidden Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38329, Enterococcus **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID:	19401
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del mar (Santa Cruz County) Hidden Beach to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hidden Beach was collected at one AB411 monitoring site (Hidden Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38293 Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of 61 samples exceeded the single sample maximum for fecal coliform (LOEs 19399 and 56509) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 61 samples exceeded the single sample maximum for fecal coliform (LOEs 19399 and 56509) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38293, Fecal Coliform Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID:	19399
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del mar (Santa Cruz County) Hidden Beach to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hidden Beach was collected at one AB411 monitoring site (Hidden Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38293, Fecal Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID:	56509
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach and results are as follows: 2 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach was collected at 1 monitoring site [Hidden Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 38352 Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of 39 samples (LOE 56510) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 66 samples exceeded the single sample maximum for total coliform (LOEs 19427 and 56511), and 0 of 22 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19429) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 39 samples (LOE 56510) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 66 samples exceeded the single sample maximum for total coliform (LOEs 19427 and 56511), and 0 of 22 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19429) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38352, Total Coliform Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID:	56511
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach was collected at 1 monitoring site [Hidden Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38352, Total Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID:	56510
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day

period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach was collected at 1 monitoring site [Hidden Beach]

Temporal Representation: Data was collected over the time period 1/3/2007-8/2/2010.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38352, Total Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID: 19427

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 27

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del mar (Santa Cruz County) Hidden Beach to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Coliform, Total.

Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.

Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Hidden Beach was collected at one monitoring site (Hidden Beach)

Temporal Representation: Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38352, Total Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID: 19429

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del mar (Santa Cruz County) Hidden Beach to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hidden Beach was collected at one monitoring site (Hidden Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37900 Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 19402 and 19403 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 1

samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19402) and 0 of 1 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19403) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19402) and 0 of 1 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19403) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37900, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID:	19402
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del mar (Santa Cruz County) Hidden Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hidden Beach was collected at one AB411 monitoring site (Hidden Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37900, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Hidden Beach

LOE ID:	19403
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del mar (Santa Cruz County) Hidden Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hidden Beach was collected at one AB411 monitoring site (Hidden Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Port San Luis Beach (oil pier)**
Water Body ID: **CAC310240212010040416304 2**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **41859** **Region 3**
Pacific Ocean at Port San Luis Beach (oil pier)

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41859, Chlorpyrifos **Region 3**
Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID: 14855

Pollutant: Chlorpyrifos

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Chlorpyrifos is 10,000 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41859, Chlorpyrifos **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14856
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Chlorpyrifos is 10000.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 42499 Region 3

Pacific Ocean at Port San Luis Beach (oil pier)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42499, Diazinon **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14877
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Diazinon is 300.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42499, Diazinon **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14876
Pollutant:	Diazinon

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Diazinon is 300 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 41860 Region 3

Pacific Ocean at Port San Luis Beach (oil pier)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table

3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41860, Dieldrin **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14897
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Dieldrin is 2.0 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof

	pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41860, Dieldrin **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14913
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Dieldrin is 2.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 41861 **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41861, Endosulfan **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14917
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Endosulfan I.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish

	and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Endoculfan is 20000.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 41912 Region 3

Pacific Ocean at Port San Luis Beach (oil pier)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41912, Endrin **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14936
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Policy For Developing California's Clean Water Act Section 303(d) List. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency.
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Endrin is 1,000 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41912, Endrin **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14937
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Endrin is 1000.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 41863 Region 3

Pacific Ocean at Port San Luis Beach (oil pier)

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41863, Heptachlor epoxide **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14957
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Heptachlor epoxide.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Total Heptachlor Epoxide is 4.0 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof

	pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41863, Heptachlor epoxide **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14972
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Heptachlor epoxide.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Heptachlor Epoxide is 4.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID **41864** **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41864, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14993
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Hexachlorobenzene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish

	and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Hexachlorobenzene is 20.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41864, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	14992
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Hexachlorobenzene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Total Hexachlorobenzene is 20 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port

	San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 41865 Region 3

Pacific Ocean at Port San Luis Beach (oil pier)

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41865, Mirex Region 3

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	15013
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Mirex.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Recommended Screening Values for target analytes - recreational fishers (Table 5-3 in USEPA 2000 (page 5-11)).
Objective/Criterion Reference:	Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA
Evaluation Guideline:	USEPA Screening Value in fish and shellfish tissue for Mirex is 800.0 ug/Kg
Guideline Reference:	Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41865, Mirex **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	15012
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Mirex.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in

	organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Policy For Developing California's Clean Water Act Section 303(d) List. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency.
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the EPA screening value for Mirex is 800 ug/Kg wet weight (USEPA 2000)
Guideline Reference:	Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID	**41866**	**Region 3**
Pacific Ocean at Port San Luis Beach (oil pier)		

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of four sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41866, Toxaphene **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	15797
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxaphene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Toxaphene is 30.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41866, Toxaphene **Region 3**

Pacific Ocean at Port San Luis Beach (oil pier)

LOE ID:	15796
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Port San Luis Beach (oil pier) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxaphene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for total Toxaphene is 30 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Port San Luis Beach (oil pier) was collected at 4 monitoring sites [SCS02SLOH001 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH002 - Port San Luis Harbor Beach 232E of pier, SCS02SLOH003 - Port San Luis Harbor Beach 10Wof pier, SCS02SLOH004 - Port San Luis Harbor Beach 10Wof pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Pleasure Point Beach**
Water Body ID: **CAC304130142010041817325 2**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37176** **Region 3**
Pacific Ocean at Pleasure Point Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of 60 samples exceeded the single sample maximum for enterococcus (LOEs 20063 and 56136) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 60 samples exceeded the single sample maximum for enterococcus (LOEs 20063 and 56136) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37176, Enterococcus **Region 3**
Pacific Ocean at Pleasure Point Beach

LOE ID: 20063

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pleasure Point Beach to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pleasure Point Beach was collected at one AB411 monitoring site (Pleasure Point Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/12/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37176, Enterococcus **Region 3**

Pacific Ocean at Pleasure Point Beach

LOE ID:	56136
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pleasure Point Beach to determine beneficial use support and results are as follows: 2 of 35 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pleasure Point Beach was collected at 1 monitoring site [Pleasure Point Beach]
Temporal Representation:	Data was collected over the time period 1/9/2007-8/9/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37926 Region 3

Pacific Ocean at Pleasure Point Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 55 samples exceeded the single sample maximum for fecal coliform (LOEs 20061 and 56137) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. [Zero of 55 samples exceeded the single sample maximum for fecal coliform (LOEs 20061 and 56137) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37926, Fecal Coliform Region 3

Pacific Ocean at Pleasure Point Beach

LOE ID:	20061
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pleasure Point Beach to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pleasure Point Beach was collected at one AB411 monitoring site (Pleasure Point Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/12/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37926, Fecal Coliform **Region 3**

Pacific Ocean at Pleasure Point Beach

LOE ID:	56137
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Pleasure Point Beach and results are as follows: 0 of 35 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pleasure Point Beach was collected at 1 monitoring site [Pleasure Point Beach]
Temporal Representation:	Data was collected over the time period 1/9/2007-8/9/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37382 **Region 3**

Pacific Ocean at Pleasure Point Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Five of 35 samples (LOE 56138) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 60 samples exceeded the single sample maximum for total coliform (LOEs 20066 and 56139), and 0 of 20 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20084) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 35 samples (LOE 56138) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 60 samples exceeded the single sample maximum for total coliform (LOEs 20066 and 56139), and 0 of 20 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20084) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37382, Total Coliform **Region 3**

Pacific Ocean at Pleasure Point Beach

LOE ID:	56139
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pleasure Point Beach to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pleasure Point Beach was collected at 1 monitoring site [Pleasure Point Beach]
Temporal Representation:	Data was collected over the time period 1/9/2007-8/9/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37382, Total Coliform **Region 3**

Pacific Ocean at Pleasure Point Beach

LOE ID:	56138
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	35
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Pleasure Point Beach to determine beneficial use support and results are as follows: 5 of 35 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day

	period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pleasure Point Beach was collected at 1 monitoring site [Pleasure Point Beach]
Temporal Representation:	Data was collected over the time period 1/9/2007-8/9/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37382, Total Coliform **Region 3**

Pacific Ocean at Pleasure Point Beach

LOE ID:	20084
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pleasure Point Beach to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pleasure Point Beach was collected at one monitoring site (Pleasure Point Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/12/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37382, Total Coliform **Region 3**

Pacific Ocean at Pleasure Point Beach

LOE ID:	20066

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pleasure Point Beach to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pleasure Point Beach was collected at one monitoring site (Pleasure Point Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/12/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37246 Region 3

Pacific Ocean at Pleasure Point Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. One line of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20065) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). The sample size for the single sample maximum criteria for Escherichia coli (E. coli) (LOE 20065) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported

using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20065) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37246, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Pleasure Point Beach

LOE ID:	20065
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pleasure Point Beach to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pleasure Point Beach was collected at one AB411 monitoring site (Pleasure Point Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/12/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier**
Water Body ID: **CAC310260142010062216470 4**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **44484** **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Five of 38 samples exceeded the geometric mean standard for enterococcus (LOEs 20082 and 32438) and 12 of 174 samples exceeded the single sample maximum for enterococcus (LOEs 20099 and 31439) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 38 samples exceeded the geometric mean standard for enterococcus (LOEs 20082 and 32438) and 12 of 174 samples exceeded the single sample maximum for enterococcus (LOEs 20099 and 31439) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44484, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID: 20082

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier to determine beneficial use support and results are as follows: 4 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB4)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44484, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	31439
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2005 through October 2006. A total of 63 dry month (April through October) single samples were collected. Two of the 63 samples exceeded the water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB4)
Temporal Representation:	Data was collected for weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44484, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	31438
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Beach monitoring data was collected from April 2005 through October 2006. 14 dry month (April through October) geomeans calculated. 1 of the 14 geomeans exceeded the geomean water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB4)
Temporal Representation:	Data was collected for weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44484, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	20099

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	111
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier to determine beneficial use support and results are as follows: 10 of 111 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB4)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 41973 Region 3

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 24 samples exceeded the geometric mean standard for total coliform (LOE 19963), 2 of 122 samples exceeded the single sample maximum for total coliform (LOE 19962), and 3 of 122 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19964) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 24 samples exceeded the geometric mean standard for total coliform (LOE 19963), 2 of 122 samples exceeded the single sample maximum for total coliform (LOE 19962), and 3 of 122 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19964) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41973, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	19964
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier to determine beneficial use support and results are as follows: 3 of 122 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one monitoring site (PB4)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41973, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	19962
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier to determine beneficial use support and results are as follows: 2 of 122 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one monitoring site (PB4)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41973, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	19963
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier to determine beneficial use support and

	results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one monitoring site (PB4)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 44876 Region 3

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This water body was added to the 303(d) list in error in 2010. No new data were assessed for the 2014 listing cycle. It should be noted that some , if not all, of the data associated with this decision are E. coli results that are evaluated using the Ocean Plan Objective for Fecal Coliform. This objective is higher than the USEPA recreation criteria for E. coli. Evaluation of the data using the Fecal Coliform Objective could result in an erroneous decision to remove the beach segment from the 303(d) List and are not used here as the basis of a decision to de-list. Four lines of evidence are available in the administrative record to assess this pollutant. Five of 38 samples exceeded the geometric mean standard for fecal coliform (LOEs 20080 and 31436) and 32 of 196 samples exceeded the single sample maximum for fecal coliform (LOEs 20081 and 31437) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 38 samples exceeded the geometric mean standard for fecal coliform (LOEs 20080 and

31436) and 32 of 196 samples exceeded the single sample maximum for fecal coliform (LOEs 20081 and 31437) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy, but some of these data are for E. coli and are incorrectly compared to the Fecal Coliform Objective. Therefore the decision must remain Do Not De-List..
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) List because applicable water quality standards for the pollutant are not used in this assessment. Some of the data included here are E. coli data and those data should not be assessed using the Fecal Coliform Objective.

Line of Evidence (LOE) for Decision ID 44876, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	31437
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	74
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Beach monitoring data was collected from April 2005 through October 2006. A total of 74 dry month (April through October) single samples were collected with 13 samples exceeding the water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB4)
Temporal Representation:	Data was collected over the time period April 2005 - October 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44876, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	31436

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Beach monitoring data was collected from April 2005 through October 2006. A total of 74 dry month (April through October) single samples were collected with 14 dry month geomeans calculated. 2 of the 14 geomeans exceeded the geomean water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB-411 California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB4)
Temporal Representation:	Data was collected over the time period April 2005 - October 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44876, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	20081
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier to determine beneficial use support and results are as follows: 19 of 122 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB4)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44876, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier

LOE ID:	20080
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB4)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave**
Water Body ID: **CAC310260142010040417325 5**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **41970** **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Twelve of 216 samples exceeded the geometric mean standard for enterococcus (LOEs 20102 and 56116) and 16 of 308 samples exceeded the single sample maximum for enterococcus (LOEs 20103 and 56384) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of 216 samples exceeded the geometric mean standard for enterococcus (LOEs 20102 and 56116) and 16 of 308 samples exceeded the single sample maximum for enterococcus (LOEs 20103 and 56384) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41970, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID: 56116

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	192
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Ten of the 192 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1220 PB5.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41970, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	56384
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	199
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 8 of 199 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave was collected at 1 monitoring site [PB5]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41970, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	20103
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	109
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 8 of 109 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB5)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41970, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	20102
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB5)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 41971 Region 3

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of 112 samples exceeded the geometric mean standard for fecal coliform (LOEs 20100 and 56118) and 10 of 306 samples exceeded the single sample maximum for fecal coliform (LOEs 20101 and 56117) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 112 samples exceeded the geometric mean standard for fecal coliform (LOEs 20100 and 56118) and 10 of 306 samples exceeded the single sample maximum for fecal coliform (LOEs 20101 and 56117) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41971, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	20101
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 6 of 110 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB5)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41971, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	20100
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB5)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41971, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	56117
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	196
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave and results are as follows: 4 of 196 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave was collected at 1 monitoring site [PB5]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41971, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	56118
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 1 of the 188 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1220 PB5.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 41983 **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Thirty nine of 197 samples (LOE 56119) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 214 samples exceeded the geometric mean standard for total coliform (LOEs 19975 and 56121), 3 of 307 samples exceeded the single sample maximum for total coliform (LOEs 19974 and 56120), and 0 of 110 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20012) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty nine of 197 samples (LOE 56119) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41983, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	19974
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 2 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one monitoring site (PB5)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41983, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID: 19975

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one monitoring site (PB5)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41983, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID: 20012

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 0 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one monitoring site (PB5)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41983, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	56120
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	197
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 1 of 197 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

	Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave was collected at 1 monitoring site [PB5]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41983, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	56119
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	197
Number of Exceedances:	39
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave to determine beneficial use support and results are as follows: 39 of 197 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave was collected at 1 monitoring site [PB5]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41983, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave

LOE ID:	56121
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	190
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 190 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1220 PB5.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave**
Water Body ID: **CAC310260142010040417392 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **43096** **Region 3**
Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Seven of 228 samples exceeded the geometric mean standard for enterococcus (LOEs 20078, 31446, and 56366) and 17 of 368 samples exceeded the single sample maximum for enterococcus (LOEs 20079, 31447, and 56365) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 228 samples exceeded the geometric mean standard for enterococcus (LOEs 20078, 31446, and 56366) and 17 of 368 samples exceeded the single sample maximum for enterococcus (LOEs 20079, 31447, and 56365) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 43096, Enterococcus **Region 3**
Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID: 56365

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	198
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 7 of 198 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave was collected at 1 monitoring site [PB3]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43096, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	56366
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	190
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 190 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1218 PB3.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43096, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	20078
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 4 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB3)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43096, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	31446
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2005 through October 2006. A total of 62 dry month (April through October) single samples were collected with 14 dry month geomeans calculated. One of the 14 geomeans exceeded the geomean water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB3)
Temporal Representation:	Data was collected over the time period 2005 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43096, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	20079
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 9 of 108 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB3)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43096, Enterococcus **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	31447
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2005 through October 2006. A total of 91 dry month (April through October) single samples were collected with 6 samples exceeding the water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB3)
Temporal Representation:	Data was collected over the time period 2005 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 41469 **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 213 samples exceeded the geometric mean standard for fecal coliform (LOEs 20076 and 56380) and 7 of 304 samples exceeded the single sample maximum for fecal coliform (LOEs 20077 and 56379) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 213 samples exceeded the geometric mean standard for fecal coliform (LOEs 20076 and 56380) and 7 of 304 samples exceeded the single sample maximum for fecal coliform (LOEs 20077 and 56379) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41469, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	20077
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 3 of 108 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB3)

Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41469, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID: 20076

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.

Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.

Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one AB411 monitoring site (PB3)

Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41469, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID: 56380

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	189
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 189 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1218 PB3.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41469, Fecal Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	56379
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	196
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave and results are as follows: 4 of 196 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo

	County), Park Ave was collected at 1 monitoring site [PB3]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 42557 Region 3

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Thirty seven of 197 samples (LOE 56381) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 215 samples exceeded the geometric mean standard for total coliform (LOEs 20105 and 56383), 3 of 305 samples exceeded the single sample maximum for total coliform (LOEs 20104 and 56382), and 0 of 108 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19961) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty seven of 197 samples (LOE 56381) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42557, Total Coliform Region 3

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	56382
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	197
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 1 of 197 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave was collected at 1 monitoring site [PB3]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42557, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	56381
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	197
Number of Exceedances:	37
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 37 of 197 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave was collected at 1 monitoring site [PB3]
Temporal Representation: Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42557, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID: 56383

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 191
Number of Exceedances: 1

Data and Information Type: Not Specified
Data Used to Assess Water Quality: One of the 191 geomeans exceeded the total coliform objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from station 1218 PB3.
Temporal Representation: Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42557, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID: 20105

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach

	(San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one monitoring site (PB3)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42557, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	20104
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 2 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one monitoring site (PB3)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411

	monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42557, Total Coliform **Region 3**

Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave

LOE ID:	19961
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave to determine beneficial use support and results are as follows: 0 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at one monitoring site (PB3)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Olde Port Beach (at restrooms)**
Water Body ID: **CAC310250122010040416421 9**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37929** **Region 3**
Pacific Ocean at Olde Port Beach (at restrooms)

Pollutant: **Enterococcus**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Five of 76 samples exceeded the geometric mean standard for enterococcus (LOEs 20207 and 56226) and 12 of 170 samples exceeded the single sample maximum for enterococcus (LOEs 20208 and 56225) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 76 samples exceeded the geometric mean standard for enterococcus (LOEs 20207 and 56226) and 12 of 170 samples exceeded the single sample maximum for enterococcus (LOEs 20208 and 56225) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 37929, Enterococcus **Region 3**
Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID: 56226

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 52 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1062 OLDE11.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37929, Enterococcus **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID:	56225
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 1 of 58 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach (at restrooms) was collected at 1 monitoring site [OLDE11]
Temporal Representation:	Data was collected over the time period 1/1/2007-9/15/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37929, Enterococcus **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID:	20208
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 11 of 112 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one AB411 monitoring site (OLDE11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37929, Enterococcus **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID:	20207
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24

Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 5 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one AB411 monitoring site (OLDE11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37520 Region 3

Pacific Ocean at Olde Port Beach (at restrooms)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 74 samples exceeded the geometric mean standard for fecal coliform (LOEs 20197 and 56228) and 4 of 165 samples exceeded the single sample maximum for fecal coliform (LOEs 20206 and 56227) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 74 samples exceeded the geometric mean standard for fecal coliform (LOEs 20197 and 56228) and 4 of 165 samples exceeded the single sample maximum for fecal coliform (LOEs 20206 and 56227) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37520, Fecal Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID:	56228
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 50 geomeans exceeded the objective. Zero of the 50 geomeans exceeded the fecal coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1062 OLDE11.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37520, Fecal Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID:	56227
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Olde Port Beach (at restrooms) and results are as follows: 0 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach (at restrooms) was collected at 1 monitoring site [OLDE11]
Temporal Representation:	Data was collected over the time period 1/1/2007-9/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37520, Fecal Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID:	20197
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one

	AB411 monitoring site (OLDE11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37520, Fecal Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID:	20206
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 4 of 108 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one AB411 monitoring site (OLDE11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37521 **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Seven of 58 samples (LOE 56248) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 76 samples exceeded the geometric mean standard for total coliform (LOEs 20214 and 56250), 1 of 166 samples exceeded the single sample maximum for total coliform (LOEs 20213 and 56249), and 1 of 108 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19941) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 58 samples (LOE 56248) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 76 samples exceeded the geometric mean standard for total coliform (LOEs 20214 and 56250), 1 of 166 samples exceeded the single sample maximum for total coliform (LOEs 20213 and 56249), and 1 of 108 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19941) for the water contact recreation water quality standard and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37521, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID:	20214
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one monitoring site (OLDE11)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37521, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID: 20213

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 1 of 108 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one monitoring site (OLDE11)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37521, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID: 19941

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 1 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one monitoring site (OLDE11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37521, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID:	56250
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 52 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from station 1062 OLDE11.
Temporal Representation: Samples were collected approximately once a week from 2007 to 2008.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37521, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID: 56248

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 58
Number of Exceedances: 7

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 7 of 58 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Olde Port Beach (at restrooms) was collected at 1 monitoring site [OLDE11]
Temporal Representation: Data was collected over the time period 1/1/2007-9/15/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37521, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (at restrooms)

LOE ID: 56249

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 58

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Olde Port Beach (at restrooms) to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach (at restrooms) was collected at 1 monitoring site [OLDE11]
Temporal Representation:	Data was collected over the time period 1/1/2007-9/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Olde Port Beach (131 yards west of restrooms)**
Water Body ID: **CAC310250122010040416485 2**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38230** **Region 3**
Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Twenty three of 213 samples exceeded the geometric mean standard for enterococcus (LOEs 20211 and 56199) and 26 of 313 samples exceeded the single sample maximum for enterococcus (LOEs 20212 and 56198) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty three of 213 samples exceeded the geometric mean standard for enterococcus (LOEs 20211 and 56199) and 26 of 313 samples exceeded the single sample maximum for enterococcus (LOEs 20212 and 56198) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38230, Enterococcus **Region 3**
Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID: 56198

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	204
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) to determine beneficial use support and results are as follows: 17 of 204 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) was collected at 1 monitoring site [OLDE12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38230, Enterococcus **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	56199
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	189
Number of Exceedances:	20
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty of the 189 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1215 OLDE12.

Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38230, Enterococcus **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	20212
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	109
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) to determine beneficial use support and results are as follows: 9 of 109 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one AB411 monitoring site (OLDE12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38230, Enterococcus **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	20211
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	3

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one AB411 monitoring site (OLDE12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 44239 Region 3

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 195 samples exceeded the geometric mean standard for fecal coliform (LOEs 20209 and 56202) and 7 of 297 samples exceeded the single sample maximum for fecal coliform (LOEs 20210 and 56201) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 195 samples exceeded the geometric mean standard for fecal coliform (LOEs 20209 and 56202) and 7 of 297 samples exceeded the single sample maximum for fecal coliform (LOEs 20210 and 56201) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44239, Fecal Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	20209
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one AB411 monitoring site (OLDE12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44239, Fecal Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	20210
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	108
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) to determine beneficial use support and results are as follows: 3 of 108 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one AB411 monitoring site (OLDE12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44239, Fecal Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	56202
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	171
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 171 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1215 OLDE12.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44239, Fecal Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	56201
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	189
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Olde Port Beach (131 yards west of restrooms) and results are as follows: 4 of 189 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) was collected at 1 monitoring site [OLDE12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37831 **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Forty two of 190 samples (LOE 56203) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 197 samples exceeded the geometric mean standard for total coliform (LOEs 19943 and 56224), 1 of 298 samples exceeded the single sample maximum for total coliform (LOEs 19942 and 56223), and 1 of 108 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19944) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty two of 190 samples (LOE 56203) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37831, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	56203
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	190
Number of Exceedances:	42
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) to determine beneficial use support and results are as follows: 42 of 190 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) was collected at 1 monitoring site [OLDE12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37831, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	56224
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	173
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 173 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1215 OLDE12.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37831, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	56223
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	190
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) to determine beneficial use support and results are as follows: 0 of 190 samples exceed the criterion for Coliform, Total.

Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) was collected at 1 monitoring site [OLDE12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37831, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	19943
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one monitoring site (OLDE12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37831, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	19942
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach (131 yards west of restrooms) to determine beneficial use support and results are as follows: 1 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one monitoring site (OLDE12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37831, Total Coliform **Region 3**

Pacific Ocean at Olde Port Beach (131 yards west of restrooms)

LOE ID:	19944
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Olde Port Beach

	(131 yards west of restrooms) to determine beneficial use support and results are as follows: 1 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Olde Port Beach was collected at one monitoring site (OLDE12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Natural Bridges Beach**
Water Body ID: **CAC304110312010041816150 4**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37300** **Region 3**
Pacific Ocean at Natural Bridges Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Six of 167 samples exceeded the geometric mean standard for enterococcus (LOEs 20142 and 56356) and 7 of 264 samples exceeded the single sample maximum for enterococcus (LOEs 20143 and 56355) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. [Six of 167 samples exceeded the geometric mean standard for enterococcus (LOEs 20142 and 56356) and 7 of 264 samples exceeded the single sample maximum for enterococcus (LOEs 20143 and 56355) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37300, Enterococcus **Region 3**
Pacific Ocean at Natural Bridges Beach

LOE ID: 20142

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at one AB411 monitoring site (Natural Bridges Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37300, Enterococcus **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	20143
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 1 of 108 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at one AB411 monitoring site (Natural Bridges Beach)
Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37300, Enterococcus **Region 3**
Pacific Ocean at Natural Bridges Beach

LOE ID: 56355

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 156
Number of Exceedances: 6

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 6 of 156 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at 1 monitoring site [Natural Bridges Beach]
Temporal Representation: Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37300, Enterococcus **Region 3**
Pacific Ocean at Natural Bridges Beach

LOE ID: 56356

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	141
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 141 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station Natural Bridges Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37490 Region 3

Pacific Ocean at Natural Bridges Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 163 samples exceeded the geometric mean standard for fecal coliform (LOEs 20140 and 56358) and 2 of 241 samples exceeded the single sample maximum for fecal coliform (LOEs 20141 and 56357) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 163 samples exceeded the geometric mean standard for fecal coliform (LOEs 20140 and 56358) and 2 of 241 samples exceeded the single sample maximum for fecal coliform (LOEs 20141 and 56357) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37490, Fecal Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	20141
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	85
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 0 of 85 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at one AB411 monitoring site (Natural Bridges Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37490, Fecal Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	20140
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at one AB411 monitoring site (Natural Bridges Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37490, Fecal Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	56358
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	141
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 141 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station Natural Bridges Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37490, Fecal Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	56357
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Natural Bridges Beach and results are as follows: 2 of 156 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at 1 monitoring site [Natural Bridges Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID **37299** **Region 3**

Pacific Ocean at Natural Bridges Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Twenty eight of 155 samples (LOE 56359) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 164 samples exceeded the geometric mean standard for total coliform (LOEs 20147 and 56373), 1 of 263 samples exceeded the single sample maximum for total coliform (LOEs 20146 and 56360), and 0 of 85 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20156) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty eight of 155 samples (LOE 56359) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37299, Total Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	56373
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 138 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station Natural Bridges Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37299, Total Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	56359
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	155
Number of Exceedances:	28
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 28 of 155 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at 1 monitoring site [Natural Bridges Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37299, Total Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	56360
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 1 of 155 samples exceed the criterion for Coliform, Total.

Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at 1 monitoring site [Natural Bridges Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37299, Total Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	20147
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at one monitoring site (Natural Bridges Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37299, Total Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	20156
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	85
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 0 of 85 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at one monitoring site (Natural Bridges Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37299, Total Coliform **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	20146
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 0 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at one monitoring site (Natural Bridges Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID	37509	Region 3
Pacific Ocean at Natural Bridges Beach		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean standard and the single sample maximum for Escherichia coli (LOEs 20144 and 20145 respectively) are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20144) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20145) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20144) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20145) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37509, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	20145
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at one AB411 monitoring site (Natural Bridges Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37509, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Natural Bridges Beach

LOE ID:	20144
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Natural Bridges Beach to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Natural Bridges Beach was collected at one AB411 monitoring site (Natural Bridges Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Morro Strand State Beach (Driftwood Ave)**
Water Body ID: **CAC310210102010041815465 6**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38012** **Region 3**
Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of 203 samples exceeded the geometric mean standard for enterococcus (LOEs 20126 and 56316) and 8 of 296 samples exceeded the single sample maximum for enterococcus (LOEs 20127 and 56315) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 203 samples exceeded the geometric mean standard for enterococcus (LOEs 20126 and 56316) and 8 of 296 samples exceeded the single sample maximum for enterococcus (LOEs 20127 and 56315) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38012, Enterococcus **Region 3**
Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID: 56315

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 2 of 188 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) was collected at 1 monitoring site [MB14]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38012, Enterococcus **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	56316
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	179
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 179 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station MB14.

Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38012, Enterococcus **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	20127
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 6 of 108 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach was collected at one AB411 monitoring site (MB14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38012, Enterococcus **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	20126
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach was collected at one AB411 monitoring site (MB14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37927 Region 3

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 200 samples exceeded the geometric mean standard for fecal coliform (LOEs 20124 and 56318) and 3 of 293 samples exceeded the single sample maximum for fecal coliform (LOEs 20125 and 56317) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 200 samples exceeded the geometric mean standard for fecal coliform (LOEs 20124 and 56318) and 3 of 293 samples exceeded the single sample maximum for fecal coliform (LOEs 20125 and 56317) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37927, Fecal Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	20125
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 3 of 107 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach was collected at one AB411 monitoring site (MB14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37927, Fecal Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	20124
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach was collected at one AB411 monitoring site (MB14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37927, Fecal Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	56317
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	186
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Morro Strand State Beach (Driftwood Ave) and results are as follows: 0 of 186 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) was collected at 1 monitoring site [MB14]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37927, Fecal Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	56318
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	176
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 176 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station MB14.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37928 **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Six of 187 samples (LOE 56319) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 202 samples exceeded the geometric mean standard for total coliform (LOEs 20129 and 56331), 3 of 294 samples exceeded the single sample maximum for total coliform (LOEs 20128 and 56330), and 1 of 107 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20130) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 187 samples (LOE 56319) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 202 samples exceeded the geometric mean standard for total coliform (LOEs 20129 and 56331), 3 of 294 samples exceeded the single sample maximum for total coliform (LOEs 20128 and 56330), and 1 of 107 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20130) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37928, Total Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	56331
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	178
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 178 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station MB14.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	

QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37928, Total Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	56330
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	187
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 0 of 187 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) was collected at 1 monitoring site [MB14]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37928, Total Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	56319
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	187
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 6 of 187 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) was collected at 1 monitoring site [MB14]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37928, Total Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	20128
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 3 of 107 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach was collected at one monitoring site (MB14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37928, Total Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	20129
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach was collected at one monitoring site (MB14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37928, Total Coliform **Region 3**

Pacific Ocean at Morro Strand State Beach (Driftwood Ave)

LOE ID:	20130
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Strand State Beach (Driftwood Ave) to determine beneficial use support and results are as follows: 1 of 107 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Strand State Beach was collected at one monitoring site (MB14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Morro Bay City Beach (Morro Rock)**
Water Body ID: **CAC310210102010040417555 0**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37058** **Region 3**
Pacific Ocean at Morro Bay City Beach (Morro Rock)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One of 204 samples exceeded the geometric mean standard for enterococcus (LOEs 19319 and 56297) and 8 of 297 samples exceeded the single sample maximum for enterococcus (LOEs 19320 and 56296) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 204 samples exceeded the geometric mean standard for enterococcus (LOEs 19319 and 56297) and 8 of 297 samples exceeded the single sample maximum for enterococcus (LOEs 19320 and 56296) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37058, Enterococcus **Region 3**
Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID: 19319

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37058, Enterococcus **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID:	19320
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 4 of 108 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB11)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37058, Enterococcus **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID: 56296

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 189
Number of Exceedances: 4

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 4 of 189 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Morro Rock) was collected at 1 monitoring site [MB11]
Temporal Representation: Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37058, Enterococcus **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID: 56297

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 180 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station MB11.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID	37113	Region 3
Pacific Ocean at Morro Bay City Beach (Morro Rock)		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 200 samples exceeded the geometric mean standard for fecal coliform (LOEs 19317 and 56299) and 2 of 292 samples exceeded the single sample maximum for fecal coliform (LOEs 19318 and 56298) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 200 samples exceeded the geometric mean standard for fecal coliform (LOEs 19317 and 56299) and 2 of 292 samples exceeded the single sample maximum for fecal coliform (LOEs 19318 and 56298) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37113, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID:	56298
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	186
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Morro Bay City Beach (Morro Rock) and results are as follows: 0 of 186 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Morro Rock) was collected at 1 monitoring site [MB11]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37113, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID:	56299
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	176

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 176 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station MB11.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37113, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID:	19318
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 2 of 106 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37113, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID:	19317
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37292 **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Six of 187

samples (LOE 56300) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 202 samples exceeded the geometric mean standard for total coliform (LOEs 19407 and 56314), 1 of 293 samples exceeded the single sample maximum for total coliform (LOEs 19407 and 56301), and 1 of 106 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19408) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 187 samples (LOE 56300) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 202 samples exceeded the geometric mean standard for total coliform (LOEs 19407 and 56314), 1 of 293 samples exceeded the single sample maximum for total coliform (LOEs 19407 and 56301), and 1 of 106 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19408) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37292, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID:	19407
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one monitoring site (MB11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37292, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID:	19406
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 1 of 106 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one monitoring site (MB11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37292, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID:	19408
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	106
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 1 of 106 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one monitoring site (MB11)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37292, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID:	56314
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	178
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 178 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station MB11.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37292, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID: 56301

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 187
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 0 of 187 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Morro Rock) was collected at 1 monitoring site [MB11]
Temporal Representation: Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37292, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Rock)

LOE ID: 56300

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 187
Number of Exceedances: 6

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Morro Bay City Beach (Morro Rock) to determine beneficial use support and results are as follows: 6 of 187 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Morro Rock) was collected at 1 monitoring site [MB11]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)**
Water Body ID: **CAC310210102010040418025 2**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36698** **Region 3**
Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Three of 211 samples exceeded the geometric mean standard for enterococcus (LOEs 19323 and 56283) and 11 of 304 samples exceeded the single sample maximum for enterococcus (LOEs 19308 and 56269) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 211 samples exceeded the geometric mean standard for enterococcus (LOEs 19323 and 56283) and 11 of 304 samples exceeded the single sample maximum for enterococcus (LOEs 19308 and 56269) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36698, Enterococcus **Region 3**
Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID: 56283

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	187
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 187 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station MB12.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36698, Enterococcus **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	56269
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	194
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Morro Bay City Beach (Morro Creek mouth) to determine beneficial use support and results are as follows: 4 of 194 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Morro Creek mouth) was collected at 1 monitoring site [MB12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36698, Enterococcus **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	19308
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth) to determine beneficial use support and results are as follows: 7 of 110 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36698, Enterococcus **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	19323
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	3

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth) to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37005 Region 3

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 208 samples exceeded the geometric mean standard for fecal coliform (LOEs 19321 and 56285) and 3 of 299 samples exceeded the single sample maximum for fecal coliform (LOEs 19322 and 56284) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 208 samples exceeded the geometric mean standard for fecal coliform (LOEs 19321 and 56285) and 3 of 299 samples exceeded the single sample maximum for fecal coliform (LOEs 19322 and 56284) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37005, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	19322
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth) to determine beneficial use support and results are as follows: 3 of 108 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37005, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	19321
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37005, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	56285
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	184
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 184 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station MB12.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37005, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	56284
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	191
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Morro Bay City Beach (Morro Creek mouth) and results are as follows: 0 of 191 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Morro Creek mouth) was collected at 1 monitoring site [MB12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID **37004** **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Ten of 192 samples (LOE 56286) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 210 samples exceeded the geometric mean standard for total coliform (LOEs 19410 and 56288), 2 of 300 samples exceeded the single sample maximum for total coliform (LOEs 19409 and 56287), and 1 of 108 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19411) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 192 samples (LOE 56286) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 210 samples exceeded the geometric mean standard for total coliform (LOEs 19410 and 56288), 2 of 300 samples exceeded the single sample maximum for total coliform (LOEs 19409 and 56287), and 1 of 108 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19411) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37004, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	56286
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	192
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Morro Bay City Beach (Morro Creek mouth) to determine beneficial use support and results are as follows: 10 of 192 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Morro Creek mouth) was collected at 1 monitoring site [MB12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37004, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	56287
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	192
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Morro Bay City Beach (Morro Creek mouth) to determine beneficial use support and results are as follows: 0 of 192 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Morro Creek mouth) was collected at 1 monitoring site [MB12]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37004, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	56288
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	186
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 186 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station MB12.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37004, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID:	19409
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth) to determine beneficial use support and results are as follows: 2 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one monitoring site (MB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37004, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID: 19410

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one monitoring site (MB12)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37004, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth)

LOE ID: 19411

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 108
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Morro Creek Mouth) to determine beneficial use support and results are as follows: 1 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one monitoring site (MB12)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Morro Bay City Beach (Atascadero Road)**
Water Body ID: **CAC310210102010041421203 7**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37041** **Region 3**
Pacific Ocean at Morro Bay City Beach (Atascadero Road)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Four of 212 samples exceeded the geometric mean standard for enterococcus (LOEs 19404 and 56247) and 14 of 305 samples exceeded the single sample maximum for enterococcus (LOEs 19405 and 56246) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. [Four of 212 samples exceeded the geometric mean standard for enterococcus (LOEs 19404 and 56247) and 14 of 305 samples exceeded the single sample maximum for enterococcus (LOEs 19405 and 56246) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37041, Enterococcus **Region 3**
Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID: 19404

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 4 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37041, Enterococcus **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID:	19405
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	111
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 11 of 111 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB13)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37041, Enterococcus **Region 3**
Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID: 56247

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 188
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 188 geomeans exceeded the entercoccus objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from station MB14.
Temporal Representation: Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37041, Enterococcus **Region 3**
Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID: 56246

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 194
Number of Exceedances: 3

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 3 of 194 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Atascadero Road) was collected at 1 monitoring site [MB13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 36835 Region 3

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 209 samples exceeded the geometric mean standard for fecal coliform (LOEs 19309 and 56265) and 5 of 301 samples exceeded the single sample maximum for fecal coliform (LOEs 19310 and 56264) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 209 samples exceeded the geometric mean standard for fecal coliform (LOEs 19309 and 56265) and 5 of 301 samples exceeded the single sample maximum for fecal coliform (LOEs 19310 and 56264) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36835, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID:	56265
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 185 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1214 MB13.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36835, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID:	56264
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	192
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan

	single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Morro Bay City Beach (Atascadero Road) and results are as follows: 1 of 192 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Atascadero Road) was collected at 1 monitoring site [MB13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36835, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID:	19309
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411

	monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36835, Fecal Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID:	19310
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	109
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 4 of 109 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one AB411 monitoring site (MB13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID **36851** **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Five of 193 samples (LOE 56266) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 211 samples exceeded the geometric mean standard for total coliform (LOEs 20106 and 56268), 3 of 302 samples exceeded the single sample maximum for total coliform (LOEs 19412 and 56267), and 3 of 109 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20123) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 193 samples (LOE 56266) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 211 samples exceeded the geometric mean standard for total coliform (LOEs 20106 and 56268), 3 of 302 samples exceeded the single sample maximum for total coliform (LOEs 19412 and 56267), and 3 of 109 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20123) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36851, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID:	19412
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	109
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 3 of 109 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one monitoring site (MB13)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36851, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID: 20106

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one monitoring site (MB13)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36851, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID: 20123

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	109
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 3 of 109 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach was collected at one monitoring site (MB13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36851, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID:	56268
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	187
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 187 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from station MB14.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36851, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID:	56267
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	193
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 0 of 193 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Atascadero Road) was collected at 1 monitoring site [MB13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36851, Total Coliform **Region 3**

Pacific Ocean at Morro Bay City Beach (Atascadero Road)

LOE ID:	56266
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	193
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Morro Bay City Beach (Atascadero Road) to determine beneficial use support and results are as follows: 5 of 193 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Morro Bay City Beach (Atascadero Road) was collected at 1 monitoring site [MB13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Moran Lake, County Beach**
Water Body ID: **CAC304130142010041421065 1**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37120** **Region 3**
Pacific Ocean at Moran Lake, County Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of 63 samples exceeded the single sample maximum for enterococcus (LOEs 19379 and 56242) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 63 samples exceeded the single sample maximum for enterococcus (LOEs 19379 and 56242) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37120, Enterococcus **Region 3**
Pacific Ocean at Moran Lake, County Beach

LOE ID: 19379

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Moran Lake County Beach to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Moran Lake, County Beach was collected at one AB411 monitoring site (Moran Lake, County Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37120, Enterococcus **Region 3**

Pacific Ocean at Moran Lake, County Beach

LOE ID:	56242
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Moran Lake, County Beach to determine beneficial use support and results are as follows: 2 of 37 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Moran Lake, County Beach was collected at 1 monitoring site [Moran Lake, County Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37755 Region 3

Pacific Ocean at Moran Lake, County Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 57 samples exceeded the single sample maximum for fecal coliform (LOEs 19377 and 56243) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 57 samples exceeded the single sample maximum for fecal coliform (LOEs 19377 and 56243) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37755, Fecal Coliform Region 3

Pacific Ocean at Moran Lake, County Beach

LOE ID:	19377
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Moran Lake County Beach to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Moran Lake, County Beach was collected at one AB411 monitoring site (Moran Lake, County Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37755, Fecal Coliform **Region 3**

Pacific Ocean at Moran Lake, County Beach

LOE ID:	56243
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Moran Lake, County Beach and results are as follows: 0 of 37 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Moran Lake, County Beach was collected at 1 monitoring site [Moran Lake, County Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37033 Region 3

Pacific Ocean at Moran Lake, County Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the fecal coliform/total coliform ratio criteria (LOE 19316) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Four of 37 samples (LOE 56244) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 63 samples exceeded the single sample maximum for total coliform (LOEs 19382 and 56245), and 0 of 20 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19316) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 37 samples (LOE 56244) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 63 samples exceeded the single sample maximum for total coliform (LOEs 19382 and 56245), and 0 of 20 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19316) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37033, Total Coliform Region 3

Pacific Ocean at Moran Lake, County Beach

LOE ID:	56244
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	37
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Moran Lake, County Beach to determine beneficial use support and results are as follows: 4 of 37 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Moran Lake, County Beach was collected at 1 monitoring site [Moran Lake, County Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37033, Total Coliform **Region 3**

Pacific Ocean at Moran Lake, County Beach

LOE ID:	56245
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Moran Lake, County Beach to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Moran Lake, County Beach was collected at 1 monitoring site [Moran Lake, County Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37033, Total Coliform **Region 3**

Pacific Ocean at Moran Lake, County Beach

LOE ID:	19316
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Moran Lake County Beach to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Moran Lake, County Beach was collected at one monitoring site (Moran Lake, County Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37033, Total Coliform **Region 3**

Pacific Ocean at Moran Lake, County Beach

LOE ID:	19382
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Moran Lake County Beach to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Moran Lake, County Beach was collected at one monitoring site (Moran Lake, County Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37756 Region 3

Pacific Ocean at Moran Lake, County Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the single sample maximum for Escherichia coli (E. coli) (LOE 19379) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table

3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19381) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19381) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37756, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Moran Lake, County Beach

LOE ID:	19381
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Moran Lake County Beach to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Moran Lake, County Beach was collected at one AB411 monitoring site (Moran Lake, County Beach)

Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)**
Water Body ID: **CAC309120122010042722003 5**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36716** **Region 3**
Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 111 samples exceeded the geometric mean standard for enterococcus (LOEs 19290 and 56217) and 2 of 181 samples exceeded the single sample maximum for enterococcus (LOEs 19345 and 56197) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 111 samples exceeded the geometric mean standard for enterococcus (LOEs 19290 and 56217) and 2 of 181 samples exceeded the single sample maximum for enterococcus (LOEs 19345 and 56197) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36716, Enterococcus **Region 3**
Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID: 56197

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 1 of 121 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) was collected at 1 monitoring site [Monterey Beach Hotel]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36716, Enterococcus **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	56217
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	95
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 95 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 79 Monterey Beach Hotel.

Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36716, Enterococcus **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	19290
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Monterey Beach Hotel)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36716, Enterococcus **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	19345
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 1 of 60 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Monterey Beach Hotel)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36717 Region 3

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 111 samples exceeded the geometric mean standard for fecal coliform (LOEs 19288 and 56219) and 0 of 180 samples exceeded the single sample maximum for fecal coliform (LOEs 19289 and 56218) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 111 samples exceeded the geometric mean standard for fecal coliform (LOEs 19288 and 56219) and 0 of 180 samples exceeded the single sample maximum for fecal coliform (LOEs 19289 and 56218) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36717, Fecal Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	19288
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Monterey Beach Hotel)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36717, Fecal Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	19289
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Monterey Beach Hotel)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36717, Fecal Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	56218
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) and results are as follows: 0 of 121 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) was collected at 1 monitoring site [Monterey Beach Hotel]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36717, Fecal Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	56219
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	95
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 95 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the total coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 79 Monterey Beach Hotel.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37032 **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Two of 121 samples (LOE 56220) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 111 samples exceeded the geometric mean standard for total coliform (LOEs 19352 and 56222), 0 of 181 samples exceeded the single sample maximum for total coliform (LOEs 19351 and 56221), and 0 of 59 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19375) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 121 samples (LOE 56220) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 111 samples exceeded the geometric mean standard for total coliform (LOEs 19352 and 56222), 0 of 181 samples exceeded the single sample maximum for total coliform (LOEs 19351 and 56221), and 0 of 59 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19375) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37032, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	56222
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	95
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 95 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 79 Monterey Beach Hotel.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	

QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37032, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	56221
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 0 of 121 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) was collected at 1 monitoring site [Monterey Beach Hotel]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37032, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	56220
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	121
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 2 of 121 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) was collected at 1 monitoring site [Monterey Beach Hotel]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37032, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	19352
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one monitoring site (Monterey Beach Hotel)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37032, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	19375
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one monitoring site (Monterey Beach Hotel)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37032, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	19351
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one monitoring site (Monterey Beach Hotel)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36715 Region 3

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean standard and the single sample maximum for Escherichia coli (LOEs 19346 and 19347 respectively) are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 4 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19346) and 0 of 4 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19347) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19346) and 0 of 4 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19347) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36715, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	19347
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Monterey Beach Hotel)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36715, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Monterey State Beach (Monterey Beach Hotel)

LOE ID:	19346

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Monterey Beach Hotel) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Monterey Beach Hotel)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Monterey State Beach (Del Monte Beach)**
Water Body ID: **CAC309120142010042722193 3**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36770** **Region 3**
Pacific Ocean at Monterey State Beach (Del Monte Beach)

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Thirteen of 129 samples exceeded the geometric mean standard for fecal coliform (LOEs 19259 and 56193) and 20 of 205 samples exceeded the single sample maximum for fecal coliform (LOEs 19283 and 56192) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of 129 samples exceeded the geometric mean standard for fecal coliform (LOEs 19259 and 56193) and 20 of 205 samples exceeded the single sample maximum for fecal coliform (LOEs 19283 and 56192) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36770, Fecal Coliform **Region 3**
Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID: 19259

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Del Monte Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36770, Fecal Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	19283
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 5 of 63 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Del Monte Beach)
Temporal Representation: Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36770, Fecal Coliform **Region 3**
Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID: 56192

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 142
Number of Exceedances: 15

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Monterey State Beach (Del Monte Beach) and results are as follows: 15 of 142 samples exceed the criterion for Coliform, Fecal.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Monterey State Beach (Del Monte Beach) was collected at 1 monitoring site [Del Monte Beach]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36770, Fecal Coliform **Region 3**
Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID: 56193

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	114
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 4 of the 114 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 72 Del Monte Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 36783 Region 3

Pacific Ocean at Monterey State Beach (Del Monte Beach)

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty eight of 129 samples exceeded the geometric mean standard for enterococcus (LOEs 19284 and 56179) and 20 of 204 samples exceeded the single sample maximum for enterococcus (LOEs 19285 and 56178) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty eight of 129 samples exceeded the geometric mean standard for enterococcus (LOEs 19284 and 56179) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36783, Enterococcus **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	56178
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	142
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 17 of 142 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach (Del Monte Beach) was collected at 1 monitoring site [Del Monte Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36783, Enterococcus **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	56179
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	114
Number of Exceedances:	27
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-seven of the 114 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 72 Del Monte Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36783, Enterococcus **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	19285
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 3 of 62 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Del Monte Beach)

Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36783, Enterococcus **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	19284
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Del Monte Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID **37096** **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Thirty four of 142 samples (LOE 56194) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 129 samples exceeded the geometric mean standard for total coliform (LOEs 19349 and 56196), 1 of 204 samples exceeded the single sample maximum for total coliform (LOEs 19348 and 56195), and 0 of 63 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19350) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty four of 142 samples (LOE 56194) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37096, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	19350
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 0 of 63 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one monitoring site (Del Monte Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37096, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	19349
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one monitoring site (Del Monte Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37096, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	19348
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one monitoring site (Del Monte Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37096, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	56194
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	142
Number of Exceedances:	34
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 34 of 142 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach (Del Monte Beach) was collected at 1 monitoring site [Del Monte Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37096, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	56196
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	114
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 114 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 72 Del Monte Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37096, Total Coliform **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	56195
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	142
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 1 of 142 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach (Del Monte Beach) was collected at 1 monitoring site [Del Monte Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID	**36860**	**Region 3**
Pacific Ocean at Monterey State Beach (Del Monte Beach)		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean standard and the single sample maximum for Escherichia coli (LOEs 19286 and 19287 respectively) are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Three of 4 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19286) and 3 of 6 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19287) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 4 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19286) and 3 of 6 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19287) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36860, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	19287
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Del Monte Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36860, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Monterey State Beach (Del Monte Beach)

LOE ID:	19286

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monterey State Beach (Del Monte Beach) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monterey State Beach was collected at one AB411 monitoring site (Del Monte Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)**
Water Body ID: **CAC310250112010040417473 2**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36633** **Region 3**
Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 204 samples exceeded the geometric mean standard for enterococcus (LOEs 19254 and 56162) and 6 of 291 samples exceeded the single sample maximum for enterococcus (LOEs 19255 and 56161) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 204 samples exceeded the geometric mean standard for enterococcus (LOEs 19254 and 56162) and 6 of 291 samples exceeded the single sample maximum for enterococcus (LOEs 19255 and 56161) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36633, Enterococcus **Region 3**
Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID: 19255

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	102
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 3 of 102 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Montana de Oro was collected at one AB411 monitoring site (HAZ10)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36633, Enterococcus **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID:	19254
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Montana de Oro was collected at one AB411 monitoring site (HAZ10)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36633, Enterococcus **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID: 56161

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 189
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 3 of 189 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) was collected at 1 monitoring site [HAZ10]
Temporal Representation: Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36633, Enterococcus **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID: 56162

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 180 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1861 HAZ10.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 36647 Region 3

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 200 samples exceeded the geometric mean standard for fecal coliform (LOEs 19252 and 56174) and 2 of 287 samples exceeded the single sample maximum for fecal coliform (LOEs 19253 and 56163) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 200 samples exceeded the geometric mean standard for fecal coliform (LOEs 19252 and 56174) and 2 of 287 samples exceeded the single sample maximum for fecal coliform (LOEs 19253 and 56163) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36647, Fecal Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID:	56163
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	187
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) and results are as follows: 1 of 187 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) was collected at 1 monitoring site [HAZ10]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36647, Fecal Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID:	56174
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	176
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 176 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1861 HAZ10.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36647, Fecal Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID:	19252
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Montana de Oro was collected at one AB411 monitoring site (HAZ10)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411

	monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36647, Fecal Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID:	19253
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 1 of 100 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Montana de Oro was collected at one AB411 monitoring site (HAZ10)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36767 **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Nine of 188 samples (LOE 56175) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 202 samples exceeded the geometric mean standard for total coliform (LOEs 19257 and 56177), 0 of 287 samples exceeded the single sample maximum for total coliform (LOEs 19256 and 56176), and 1 of 100 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19258) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 188 samples (LOE 56175) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 202 samples exceeded the geometric mean standard for total coliform (LOEs 19257 and 56177), 0 of 287 samples exceeded the single sample maximum for total coliform (LOEs 19256 and 56176), and 1 of 100 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19258) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36767, Total Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID:	19258
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 1 of 100 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Montana de Oro was collected at one monitoring site (HAZ10)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36767, Total Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID: 19257

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 24
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Montana de Oro was collected at one monitoring site (HAZ10)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36767, Total Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID: 19256

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	99
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 0 of 99 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Montana de Oro was collected at one monitoring site (HAZ10)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36767, Total Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID:	56175
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	188
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 9 of 188 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) was collected at 1 monitoring site [HAZ10]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36767, Total Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID:	56177
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	178
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 178 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1861 HAZ10.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36767, Total Coliform **Region 3**

Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth)

LOE ID:	56176
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	188
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) to determine beneficial use support and results are as follows: 0 of 188 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Montana de Oro (Hazard Canyon Creek mouth) was collected at 1 monitoring site [HAZ10]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Mitchells Cove Beach**
Water Body ID: **CAC304120532010041420353 2**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37422** **Region 3**
Pacific Ocean at Mitchells Cove Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 59 samples exceeded the single sample maximum for enterococcus (LOEs 19196 and 56146) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 59 samples exceeded the single sample maximum for enterococcus (LOEs 19196 and 56146) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37422, Enterococcus **Region 3**
Pacific Ocean at Mitchells Cove Beach

LOE ID: 19196

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Mitchells Cove Beach to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Mitchells Cove Beach was collected at one AB411 monitoring site (Mitchell's Cove Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37422, Enterococcus **Region 3**

Pacific Ocean at Mitchells Cove Beach

LOE ID:	56146
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Mitchells Cove Beach to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Mitchells Cove Beach was collected at 1 monitoring site [Mitchell's Cove Beach]
Temporal Representation:	Data was collected over the time period 1/16/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37423 **Region 3**

Pacific Ocean at Mitchells Cove Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of 53 samples exceeded the single sample maximum for fecal coliform (LOEs 19194 and 56147) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 53 samples exceeded the single sample maximum for fecal coliform (LOEs 19194 and 56147) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37423, Fecal Coliform **Region 3**

Pacific Ocean at Mitchells Cove Beach

LOE ID:	19194
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Mitchells Cove Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Mitchells Cove Beach was collected at one AB411 monitoring site (Mitchell's Cove Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37423, Fecal Coliform **Region 3**

Pacific Ocean at Mitchells Cove Beach

LOE ID:	56147
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Mitchells Cove Beach and results are as follows: 1 of 34 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Mitchells Cove Beach was collected at 1 monitoring site [Mitchell's Cove Beach]
Temporal Representation:	Data was collected over the time period 1/16/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37345 **Region 3**

Pacific Ocean at Mitchells Cove Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the fecal coliform/total coliform ratio criteria (LOE 19222) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Seven of 34 samples (LOE 56148) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 59 samples exceeded the single sample maximum for total coliform (LOEs 19220 and 56149), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19222) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 34 samples (LOE 56148) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37345, Total Coliform **Region 3**

Pacific Ocean at Mitchells Cove Beach

LOE ID:	19220
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Mitchells Cove Beach to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Mitchells Cove Beach was collected at one monitoring site (Mitchell's Cove Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37345, Total Coliform **Region 3**

Pacific Ocean at Mitchells Cove Beach

LOE ID:	19222
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Mitchells Cove Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005

	AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Mitchells Cove Beach was collected at one monitoring site (Mitchell's Cove Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37345, Total Coliform **Region 3**

Pacific Ocean at Mitchells Cove Beach

LOE ID:	56149
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Mitchells Cove Beach to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Mitchells Cove Beach was collected at 1 monitoring site [Mitchell's Cove Beach]
Temporal Representation:	Data was collected over the time period 1/16/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37345, Total Coliform **Region 3**

Pacific Ocean at Mitchells Cove Beach

LOE ID:	56148
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	34
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Mitchells Cove Beach to determine beneficial use support and results are as follows: 7 of 34 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Mitchells Cove Beach was collected at 1 monitoring site [Mitchell's Cove Beach]
Temporal Representation:	Data was collected over the time period 1/16/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37408 **Region 3**

Pacific Ocean at Mitchells Cove Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the single sample maximum for Escherichia coli (E. coli) (LOE 19198) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19198) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19198) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37408, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Mitchells Cove Beach

LOE ID:	19198
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Mitchells Cove Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Mitchells Cove Beach was collected at

	one AB411 monitoring site (Mitchell's Cove Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Manresa Beach**
Water Body ID: **CAC305100302010041420244 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37598** **Region 3**
Pacific Ocean at Manresa Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of 64 samples exceeded the single sample maximum for enterococcus (LOEs 19622 and 56394) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 64 samples exceeded the single sample maximum for enterococcus (LOEs 19622 and 56394) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37598, Enterococcus **Region 3**
Pacific Ocean at Manresa Beach

LOE ID: 56394

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Manresa Beach to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Manresa Beach was collected at 1 monitoring site [Manresa Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37598, Enterococcus **Region 3**

Pacific Ocean at Manresa Beach

LOE ID:	19622
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Manresa Beach to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Manresa Beach was collected at one AB411 monitoring site (Manresa Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36610 **Region 3**

Pacific Ocean at Manresa Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 59 samples exceeded the single sample maximum for fecal coliform (LOEs 19620 and 56395) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 59 samples exceeded the single sample maximum for fecal coliform (LOEs 19620 and 56395) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36610, Fecal Coliform **Region 3**

Pacific Ocean at Manresa Beach

LOE ID:	19620
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Manresa Beach to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Manresa Beach was collected at one AB411 monitoring site (Manresa Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36610, Fecal Coliform **Region 3**

Pacific Ocean at Manresa Beach

LOE ID:	56395
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Manresa Beach and results are as follows: 0 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Manresa Beach was collected at 1 monitoring site [Manresa Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 36632 Region 3

Pacific Ocean at Manresa Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of 39 samples (LOE 56128) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 64 samples exceeded the single sample maximum for total coliform (LOEs 19625 and 56129), and 0 of 20 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19192) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 39 samples (LOE 56128) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 64 samples exceeded the single sample maximum for total coliform (LOEs 19625 and 56129), and 0 of 20 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19192) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36632, Total Coliform Region 3

Pacific Ocean at Manresa Beach

LOE ID:	56128
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Manresa Beach to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Manresa Beach was collected at 1 monitoring site [Manresa Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36632, Total Coliform **Region 3**

Pacific Ocean at Manresa Beach

LOE ID:	56129
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Manresa Beach to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Manresa Beach was collected at 1 monitoring site [Manresa Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/2/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36632, Total Coliform **Region 3**

Pacific Ocean at Manresa Beach

LOE ID:	19192
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Manresa Beach to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Manresa Beach was collected at one monitoring site (Manresa Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36632, Total Coliform **Region 3**

Pacific Ocean at Manresa Beach

LOE ID:	19625

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Manresa Beach to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Manresa Beach was collected at one monitoring site (Manresa Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37597 Region 3

Pacific Ocean at Manresa Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the single sample maximum for Escherichia coli (E. coli) (LOE 19624) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19624) for the water contact

recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19624) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37597, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Manresa Beach

LOE ID:	19624
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Manresa Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Manresa Beach was collected at one AB411 monitoring site (Manresa Beach)
Temporal Representation:	Data was collected over the time period 4/5/2004 - 12/4/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk**
Water Body ID: **CAC304120532010041420133 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37151** **Region 3**
Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Nine of 188 samples exceeded the geometric mean standard for enterococcus (LOEs 19564 and 56352) and 7 of 293 samples exceeded the single sample maximum for enterococcus (LOEs 19565 and 56351) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 188 samples exceeded the geometric mean standard for enterococcus (LOEs 19564 and 56352) and 7 of 293 samples exceeded the single sample maximum for enterococcus (LOEs 19565 and 56351) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37151, Enterococcus **Region 3**
Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID: 19564

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ Boardwalk)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37151, Enterococcus **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID:	19565
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 3 of 112 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ Boardwalk)
Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37151, Enterococcus **Region 3**
Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID: 56351

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 181
Number of Exceedances: 4

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 4 of 181 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk was collected at 1 monitoring site [Main Beach @ Boardwalk]
Temporal Representation: Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37151, Enterococcus **Region 3**
Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID: 56352

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	162
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 162 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 856 Main Beach at Boardwalk.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37223 Region 3

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Eleven of 185 samples exceeded the geometric mean standard for fecal coliform (LOEs 19562 and 56354) and 15 of 274 samples exceeded the single sample maximum for fecal coliform (LOEs 19563 and 56353) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 185 samples exceeded the geometric mean standard for fecal coliform (LOEs 19562 and 56354) and 15 of 274 samples exceeded the single sample maximum for fecal coliform (LOEs 19563 and 56353) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37223, Fecal Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID:	19562
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ Boardwalk)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37223, Fecal Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID:	19563
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	89
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 1 of 89 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ Boardwalk)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37223, Fecal Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID:	56354
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	164
Number of Exceedances:	11
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 11 of the 164 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 856 Main Beach at Boardwalk.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37223, Fecal Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID:	56353
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk and results are as follows: 14 of 185 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk was collected at 1 monitoring site [Main Beach @ Boardwalk]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID **37132** **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Eighty eight of 181 samples (LOE 56367) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Seven of 188 samples exceeded the geometric mean standard for total coliform (LOEs 19594 and 56369), 5 of 292 samples exceeded the single sample maximum for total coliform (LOEs 19593 and 56368), and 0 of 89 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19595) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighty eight of 181 samples (LOE 56367) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37132, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID:	19594
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 2 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Main Beach was collected at one monitoring site (Main Beach @ Boardwalk)

Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37132, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID: 19593

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 111

Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 1 of 111 samples exceed the criterion for Coliform, Total.

Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.

Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Main Beach was collected at one monitoring site (Main Beach @ Boardwalk)

Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37132, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID: 19595

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	89
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 0 of 89 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one monitoring site (Main Beach @ Boardwalk)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37132, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID:	56368
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	181
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 4 of 181 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk was collected at 1 monitoring site [Main Beach @ Boardwalk]
Temporal Representation: Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37132, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID: 56369

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 162
Number of Exceedances: 5

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Five of the 162 geomeans exceeded the total coliform objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from station 865 Main Beach at Boardwalk.
Temporal Representation: Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37132, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID: 56367

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 181

Number of Exceedances:	88
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 88 of 181 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk was collected at 1 monitoring site [Main Beach @ Boardwalk]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37038 Region 3

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean standard and the single sample maximum for Escherichia coli (LOEs 19566 and 19567 respectively) are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Two of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19566) and 3 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19567) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19566) and 3 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19567) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37038, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID:	19567
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ Boardwalk)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37038, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk

LOE ID:	19566

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ Boardwalk)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth**
Water Body ID: **CAC304120532010041419443 2**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36812** **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Twelve of 175 samples exceeded the geometric mean standard for enterococcus (LOEs 19589 and 56371) and 12 of 276 samples exceeded the single sample maximum for enterococcus (LOEs 19590 and 56370) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of 175 samples exceeded the geometric mean standard for enterococcus (LOEs 19589 and 56371) and 12 of 276 samples exceeded the single sample maximum for enterococcus (LOEs 19590 and 56370) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36812, Enterococcus **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID: 56371

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 149 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 269 Main Beach at San Lorenzo River.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36812, Enterococcus **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	56370
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	163
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 6 of 163 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth was collected at 1 monitoring site [Main Beach @ San Lorenzo River]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36812, Enterococcus **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	19589
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 4 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ San Lorenzo River)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36812, Enterococcus **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	19590
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	113
Number of Exceedances:	6

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 6 of 113 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ San Lorenzo River)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36655 Region 3

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of 174 samples exceeded the geometric mean standard for fecal coliform (LOEs 19568 and 56390) and 10 of 260 samples exceeded the single sample maximum for fecal coliform (LOEs 19569 and 56372) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 174 samples exceeded the geometric mean standard for fecal coliform (LOEs 19568 and 56390) and 10 of 260 samples exceeded the single sample maximum for fecal coliform (LOEs 19569 and 56372) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36655, Fecal Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	19568
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 2 of 23 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ San Lorenzo River)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36655, Fecal Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	19569
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	94
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 3 of 94 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ San Lorenzo River)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36655, Fecal Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	56390
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 151 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 269 Main Beach at San Lorenzo River.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36655, Fecal Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	56372
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	166
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth and results are as follows: 7 of 166 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth was collected at 1 monitoring site [Main Beach @ San Lorenzo River]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 36609 **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Seventy two of 164 samples (LOE 56391) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Eleven of 176 samples exceeded the geometric mean standard for total coliform (LOEs 19617 and 56393), 5 of 280 samples exceeded the single sample maximum for total coliform (LOEs 19596 and 56392), and 0 of 94 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19618) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy two of 164 samples (LOE 56391) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36609, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	56392
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	164
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 4 of 164 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth was collected at 1 monitoring site [Main Beach @ San Lorenzo River]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36609, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	56393
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	150
Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the 150 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 269 Main Beach @ San Lorenzo River.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36609, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	56391
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	164
Number of Exceedances:	72
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Main Beach (Santa

	Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 72 of 164 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth was collected at 1 monitoring site [Main Beach @ San Lorenzo River]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36609, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	19617
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 2 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one monitoring site (Main Beach @ San Lorenzo River)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36609, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	19618
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	94
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 0 of 94 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one monitoring site (Main Beach @ San Lorenzo River)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36609, Total Coliform **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	19596
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	116
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 1 of 116 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one monitoring site (Main Beach @ San Lorenzo River)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36811 Region 3

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean standard and the single sample maximum for Escherichia coli (LOEs 19591 and 19592 respectively) are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19591) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19592) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19591) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19592) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36811, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	19591
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ San Lorenzo River)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36811, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth

LOE ID:	19592

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Main Beach was collected at one AB411 monitoring site (Main Beach @ San Lorenzo River)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Lovers Point (Monterey County)**
Water Body ID: **CAC309500422010042723363 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37754** **Region 3**
Pacific Ocean at Lovers Point (Monterey County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Six of 115 samples exceeded the geometric mean standard for enterococcus (LOEs 19280 and 56339) and 4 of 188 samples exceeded the single sample maximum for enterococcus (LOEs 19281 and 56338) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 115 samples exceeded the geometric mean standard for enterococcus (LOEs 19280 and 56339) and 4 of 188 samples exceeded the single sample maximum for enterococcus (LOEs 19281 and 56338) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37754, Enterococcus **Region 3**
Pacific Ocean at Lovers Point (Monterey County)

LOE ID: 19280

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lover's Point was collected at one AB411 monitoring site (Lover's Point)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37754, Enterococcus **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	19281
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 2 of 61 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Lover's Point was collected at one AB411 monitoring site (Lover's Point)
Temporal Representation: Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37754, Enterococcus **Region 3**
Pacific Ocean at Lovers Point (Monterey County)

LOE ID: 56338

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 127
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 2 of 127 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Lovers Point (Monterey County) was collected at 1 monitoring site [Lover's Point]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37754, Enterococcus **Region 3**
Pacific Ocean at Lovers Point (Monterey County)

LOE ID: 56339

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	99
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 99 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcusstates that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 880 Lover's Point.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37614 Region 3

Pacific Ocean at Lovers Point (Monterey County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of 115 samples exceeded the geometric mean standard for fecal coliform (LOEs 19278 and 56341) and 6 of 188 samples exceeded the single sample maximum for fecal coliform (LOEs 19279 and 56340) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 115 samples exceeded the geometric mean standard for fecal coliform (LOEs 19278 and 56341) and 6 of 188 samples exceeded the single sample maximum for fecal coliform (LOEs 19279 and 56340) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37614, Fecal Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	19279
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 2 of 60 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lover's Point was collected at one AB411 monitoring site (Lover's Point)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37614, Fecal Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	19278
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lover's Point was collected at one AB411 monitoring site (Lover's Point)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37614, Fecal Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	56341
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	99
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 2 of the 99 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 880 Lover's Point.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	

QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37614, Fecal Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	56340
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Lovers Point (Monterey County) and results are as follows: 4 of 128 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lovers Point (Monterey County) was collected at 1 monitoring site [Lover's Point]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37131 **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Twenty of 127 samples (LOE 56342) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 115 samples exceeded the geometric mean standard for total coliform (LOEs 19541 and 56350), 0 of 188 samples exceeded the single sample maximum for total coliform (LOEs 19540 and 56349), and 0 of 60 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19542) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty of 127 samples (LOE 56342) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 115 samples exceeded the geometric mean standard for total coliform (LOEs 19541 and 56350), 0 of 188 samples exceeded the single sample maximum for total coliform (LOEs 19540 and 56349), and 0 of 60 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19542) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37131, Total Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	56350
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	99
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 99 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 880 Lover's Point.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37131, Total Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	56349
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	127
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 0 of 127 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lovers Point (Monterey County) was collected at 1 monitoring site [Lover's Point]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37131, Total Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	56342
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	127
Number of Exceedances:	20
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Lovers Point (Monterey

	County) to determine beneficial use support and results are as follows: 20 of 127 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lovers Point (Monterey County) was collected at 1 monitoring site [Lover's Point]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37131, Total Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	19540
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lover's Point was collected at one monitoring site (Lover's Point)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37131, Total Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	19542
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lover's Point was collected at one monitoring site (Lover's Point)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37131, Total Coliform **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	19541
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lover's Point was collected at one monitoring site (Lover's Point)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36640 Region 3

Pacific Ocean at Lovers Point (Monterey County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum for Escherichia coli (LOEs 19282 and 19307) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. One of 4 samples exceeded the geometric mean standard for Escherichia coli (LOE 19282) and 0 of 4 samples exceeded the single sample maximum for Escherichia coli (LOE 19307) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of 4 samples exceeded the geometric mean standard for Escherichia coli (LOE 19282) and 0 of 4 samples exceeded the single sample maximum for Escherichia coli (LOE 19307) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36640, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	19282
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lover's Point was collected at one AB411 monitoring site (Lover's Point)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36640, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Lovers Point (Monterey County)

LOE ID:	19307

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lovers Point (Monterey County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lover's Point was collected at one AB411 monitoring site (Lover's Point)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Lighthouse Beach (Santa Cruz County)**
Water Body ID: **CAC304120532010042722350 5**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37436** **Region 3**
Pacific Ocean at Lighthouse Beach (Santa Cruz County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of 59 samples exceeded the single sample maximum for enterococcus (LOEs 19537 and 56326) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 59 samples exceeded the single sample maximum for enterococcus and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37436, Enterococcus **Region 3**
Pacific Ocean at Lighthouse Beach (Santa Cruz County)

LOE ID: 56326

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 33

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Lighthouse Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lighthouse Beach (Santa Cruz County) was collected at 1 monitoring site [Lighthouse Beach]
Temporal Representation:	Data was collected over the time period 2/20/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37436, Enterococcus **Region 3**

Pacific Ocean at Lighthouse Beach (Santa Cruz County)

LOE ID:	19537
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lighthouse Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lighthouse Beach was collected at one AB411 monitoring site (Lighthouse Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37115 Region 3

Pacific Ocean at Lighthouse Beach (Santa Cruz County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 53 samples exceeded the single sample maximum for fecal coliform (LOEs 19535 and 56327) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 53 samples exceeded the single sample maximum for fecal coliform and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37115, Fecal Coliform Region 3

Pacific Ocean at Lighthouse Beach (Santa Cruz County)

LOE ID:	19535
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lighthouse Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lighthouse Beach was collected at one AB411 monitoring site (Lighthouse Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37115, Fecal Coliform **Region 3**

Pacific Ocean at Lighthouse Beach (Santa Cruz County)

LOE ID:	56327
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Lighthouse Beach (Santa Cruz County) and results are as follows: 0 of 34 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lighthouse Beach (Santa Cruz County)

	was collected at 1 monitoring site [Lighthouse Beach]
Temporal Representation:	Data was collected over the time period 2/20/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 36699 Region 3

Pacific Ocean at Lighthouse Beach (Santa Cruz County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the fecal coliform/total coliform ratio criteria (LOE 19277) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. One of 32 samples (LOE 56328) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 58 samples exceeded the single sample maximum for total coliform (LOEs 19275 and 56329), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19277) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 58 samples exceeded the single sample maximum for total coliform (LOEs 19275 and 56329), and 0 of 19 samples exceeded the fecal coliform/total coliform ratio criteria and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36699, Total Coliform Region 3

Pacific Ocean at Lighthouse Beach (Santa Cruz County)

LOE ID:	56328
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Lighthouse Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lighthouse Beach (Santa Cruz County) was collected at 1 monitoring site [Lighthouse Beach]
Temporal Representation:	Data was collected over the time period 2/20/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36699, Total Coliform **Region 3**

Pacific Ocean at Lighthouse Beach (Santa Cruz County)

LOE ID:	56329
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Lighthouse Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Lighthouse Beach (Santa Cruz County) was collected at 1 monitoring site [Lighthouse Beach]
Temporal Representation: Data was collected over the time period 2/20/2007-8/16/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36699, Total Coliform **Region 3**
Pacific Ocean at Lighthouse Beach (Santa Cruz County)

LOE ID: 19277

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 19
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Lighthouse Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Lighthouse Beach was collected at one monitoring site (Lighthouse Beach)
Temporal Representation: Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36699, Total Coliform **Region 3**
Pacific Ocean at Lighthouse Beach (Santa Cruz County)

LOE ID: 19275

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lighthouse Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lighthouse Beach was collected at one monitoring site (Lighthouse Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37465 Region 3

Pacific Ocean at Lighthouse Beach (Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 samples exceed the criterion for Escherichia coli (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 samples exceed the criterion for Escherichia coli and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37465, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Lighthouse Beach (Santa Cruz County)

LOE ID:	19539
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Lighthouse Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Lighthouse Beach was collected at one AB411 monitoring site (Lighthouse Beach)
Temporal Representation:	Data was collected over the time period 3/22/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Hearst State Beach (South of Pier)**
Water Body ID: **CAC310130212010041419035 9**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37100** **Region 3**
Pacific Ocean at Hearst State Beach (South of Pier)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

This sample size for the geometric mean for enterococcus (LOE 19369) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 15 samples exceeded the geometric mean standard for enterococcus (LOE 19369) and 3 of 64 samples exceeded the single sample maximum for enterococcus (LOE 19370) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 15 samples exceeded the geometric mean standard for enterococcus (LOE 19369) and 3 of 64 samples exceeded the single sample maximum for enterococcus (LOE 19370) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37100, Enterococcus **Region 3**
Pacific Ocean at Hearst State Beach (South of Pier)

LOE ID: 19370

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	64
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (South of Pier) to determine beneficial use support and results are as follows: 3 of 64 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one AB411 monitoring site (HSB25)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37100, Enterococcus **Region 3**

Pacific Ocean at Hearst State Beach (South of Pier)

LOE ID:	19369
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (South of Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one AB411 monitoring site (HSB25)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36749 Region 3

Pacific Ocean at Hearst State Beach (South of Pier)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size for the geometric mean for fecal coliform (LOE 19367) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 15 samples exceeded the geometric mean standard for fecal coliform (LOE 19367) and 2 of 63 samples exceeded the single sample maximum for fecal coliform (LOE 19368) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 15 samples exceeded the geometric mean standard for fecal coliform (LOE 19367) and 2 of 63 samples exceeded the single sample maximum for fecal coliform (LOE 19368) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36749, Fecal Coliform **Region 3**

Pacific Ocean at Hearst State Beach (South of Pier)

LOE ID:	19367
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (South of Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one AB411 monitoring site (HSB25)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36749, Fecal Coliform **Region 3**

Pacific Ocean at Hearst State Beach (South of Pier)

LOE ID:	19368
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach

	(South of Pier) to determine beneficial use support and results are as follows: 2 of 63 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one AB411 monitoring site (HSB25)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36750 Region 3

Pacific Ocean at Hearst State Beach (South of Pier)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size for the geometric mean for total coliform (LOE 19396) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 15 samples exceeded the geometric mean standard for total coliform (LOE19396), 1 of 63 samples exceeded the single sample maximum for total coliform (LOE 19374), and 1 of 63 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19397) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 15 samples exceeded the geometric mean standard for total coliform (LOE19396), 1 of 63 samples exceeded the single sample maximum for total coliform (LOE 19374), and 1 of 63 samples

exceeded the fecal coliform/total coliform ratio criteria (LOE 19397) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36750, Total Coliform **Region 3**

Pacific Ocean at Hearst State Beach (South of Pier)

LOE ID:	19374
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (South of Pier) to determine beneficial use support and results are as follows: 1 of 63 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one monitoring site (HSB25)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36750, Total Coliform **Region 3**

Pacific Ocean at Hearst State Beach (South of Pier)

LOE ID:	19396
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (South of Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one monitoring site (HSB25)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36750, Total Coliform **Region 3**

Pacific Ocean at Hearst State Beach (South of Pier)

LOE ID:	19397
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (South of Pier) to determine beneficial use support and results are as follows: 1 of 63 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one monitoring site (HSB25)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Hearst State Beach (North of Pier)**
Water Body ID: **CAC310130212010041418521 5**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36736** **Region 3**
Pacific Ocean at Hearst State Beach (North of Pier)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

This sample size for the geometric mean for enterococcus (LOE 19344) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 15 samples exceeded the geometric mean standard for enterococcus (LOE 19344) and 3 of 64 samples exceeded the single sample maximum for enterococcus (LOE 19366) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 15 samples exceeded the geometric mean standard for enterococcus (LOE 19344) and 3 of 64 samples exceeded the single sample maximum for enterococcus (LOE 19366) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36736, Enterococcus **Region 3**
Pacific Ocean at Hearst State Beach (North of Pier)

LOE ID: 19366

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	64
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (North of Pier) to determine beneficial use support and results are as follows: 3 of 64 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one AB411 monitoring site (HSB24)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36736, Enterococcus **Region 3**

Pacific Ocean at Hearst State Beach (North of Pier)

LOE ID:	19344
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (North of Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one AB411 monitoring site (HSB24)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36820 Region 3

Pacific Ocean at Hearst State Beach (North of Pier)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size for the geometric mean for feacl coliform (LOE 19342) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 15 samples exceeded the geometric mean standard for fecal coliform (LOE 19342) and 2 of 63 samples exceeded the single sample maximum for fecal coliform (LOE 19343) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 15 samples exceeded the geometric mean standard for fecal coliform (LOE 19342) and 2 of 63 samples exceeded the single sample maximum for fecal coliform (LOE 19343) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36820, Fecal Coliform **Region 3**

Pacific Ocean at Hearst State Beach (North of Pier)

LOE ID:	19343
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (North of Pier) to determine beneficial use support and results are as follows: 2 of 63 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one AB411 monitoring site (HSB24)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36820, Fecal Coliform **Region 3**

Pacific Ocean at Hearst State Beach (North of Pier)

LOE ID:	19342
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach

	(North of Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one AB411 monitoring site (HSB24)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36821 Region 3

Pacific Ocean at Hearst State Beach (North of Pier)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size for the geometric mean for total coliform (LOE 19372) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 15 samples exceeded the geometric mean standard for total coliform (LOE 19372), 0 of 63 samples exceeded the single sample maximum for total coliform (LOE 19371), and 1 of 63 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19373) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 15 samples exceeded the geometric mean standard for total coliform (LOE 19372), 0 of 63 samples exceeded the single sample maximum for total coliform (LOE 19371), and 1 of 63 samples

exceeded the fecal coliform/total coliform ratio criteria (LOEs 19373) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36821, Total Coliform **Region 3**

Pacific Ocean at Hearst State Beach (North of Pier)

LOE ID:	19373
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (North of Pier) to determine beneficial use support and results are as follows: 1 of 63 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one monitoring site (HSB24)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36821, Total Coliform **Region 3**

Pacific Ocean at Hearst State Beach (North of Pier)

LOE ID:	19372
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (North of Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one monitoring site (HSB24)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36821, Total Coliform **Region 3**

Pacific Ocean at Hearst State Beach (North of Pier)

LOE ID:	19371
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hearst State Beach (North of Pier) to determine beneficial use support and results are as follows: 0 of 63 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hearst Memorial State Beach was collected at one monitoring site (HSB24)
Temporal Representation:	Data was collected over the time period 6/15/2005 - 8/8/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Corcoran Lagoon Beach**
Water Body ID: **CAC304130142010041418374 0**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37626** **Region 3**
Pacific Ocean at Corcoran Lagoon Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of 61 samples exceeded the single sample maximum for enterococcus (LOEs 19474 and 56108) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 61 samples exceeded the single sample maximum for fecal coliform (LOEs 19474 and 56108) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37626, Enterococcus **Region 3**
Pacific Ocean at Corcoran Lagoon Beach

LOE ID: 19474

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Corcoran Lagoon Beach to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Corcoran Lagoon Beach was collected at one AB411 monitoring site (Corcoran Lagoon Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37626, Enterococcus **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

LOE ID:	56108
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Corcoran Lagoon Beach to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Corcoran Lagoon Beach was collected at 1 monitoring site [Corcoran Lagoon Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37627 **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 55 samples exceeded the single sample maximum for fecal coliform (LOEs 19453 and 56109) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 55 samples exceeded the single sample maximum for fecal coliform (LOEs 19453 and 56109) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37627, Fecal Coliform **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

LOE ID:	19453
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Corcoran Lagoon Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Corcoran Lagoon Beach was collected at one AB411 monitoring site (Corcoran Lagoon Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37627, Fecal Coliform **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

LOE ID:	56109
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Corcoran Lagoon Beach and results are as follows: 0 of 36 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Corcoran Lagoon Beach was collected at 1 monitoring site [Corcoran Lagoon Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37097 **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Three of 36 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 61 samples exceeded the single sample maximum for total coliform (LOEs 19477 and 56111), and 0 of 55 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19479 and 56112) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 36 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 61 samples exceeded the single sample maximum for total coliform (LOEs 19477 and 56111), and 0 of 55 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19479 and 56112) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37097, Total Coliform **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

LOE ID:	56111
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Corcoran Lagoon Beach to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Corcoran Lagoon Beach was collected at 1 monitoring site [Corcoran Lagoon Beach]
Temporal Representation:	Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37097, Total Coliform **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

LOE ID:	56112
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 36 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at station Corcoran Lagoon Beach.
Temporal Representation: The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37097, Total Coliform **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

LOE ID: 56110

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 36
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean at Corcoran Lagoon Beach to determine beneficial use support and results are as follows: 3 of 36 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Corcoran Lagoon Beach was collected at 1 monitoring site [Corcoran Lagoon Beach]
Temporal Representation: Data was collected over the time period 1/17/2007-8/16/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37097, Total Coliform **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

LOE ID: 19479

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Corcoran Lagoon Beach to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Corcoran Lagoon Beach was collected at one monitoring site (Corcoran Lagoon Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37097, Total Coliform **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

LOE ID:	19477
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Corcoran Lagoon Beach to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Corcoran Lagoon Beach was collected at one monitoring site (Corcoran Lagoon Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37098 **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. When compared to the Ocean Plan Objectives for Water Contact Recreation, 0 of 2 samples exceeded the single sample maximum Objective (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceeded the single sample maximum Objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37098, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Corcoran Lagoon Beach

LOE ID:	19476
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Corcoran Lagoon Beach to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Corcoran Lagoon Beach was collected at one AB411 monitoring site (Corcoran Lagoon Beach)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 12/18/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Cayucos (Old Creek Mouth)**
Water Body ID: **CAC310170122010041417101 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37625** **Region 3**
Pacific Ocean at Cayucos (Old Creek Mouth)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Four of 210 samples exceeded the geometric mean standard for enterococcus (LOEs 19393 and 56101) and 10 of 301 samples exceeded the single sample maximum for enterococcus (LOEs 19394 and 56100) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 210 samples exceeded the geometric mean standard for enterococcus (LOEs 19393 and 56101) and 10 of 301 samples exceeded the single sample maximum for enterococcus (LOEs 19394 and 56100) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37625, Enterococcus **Region 3**
Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID: 56100

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	193
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 3 of 193 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos (Old Creek Mouth) was collected at 1 monitoring site [CAY13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37625, Enterococcus **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	56101
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	186
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 186 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at station CAY13 .
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37625, Enterococcus **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	19393
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37625, Enterococcus **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	19394
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108

Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 7 of 108 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37427 Region 3

Pacific Ocean at Cayucos (Old Creek Mouth)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 207 samples exceeded the geometric mean standard for fecal coliform (LOEs 19391 and 56103) and 5 of 300 samples exceeded the single sample maximum for fecal coliform (LOEs 19392 and 56102) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 207 samples exceeded the geometric mean standard for fecal coliform (LOEs 19391 and 56103) and 5 of 300 samples exceeded the single sample maximum for fecal coliform (LOEs 19392 and 56102) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37427, Fecal Coliform **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	19391
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37427, Fecal Coliform **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	19392
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	108
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 2 of 108 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37427, Fecal Coliform **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	56102
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	192
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Cayucos (Old Creek Mouth) and results are as follows: 3 of 192 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos (Old Creek Mouth) was collected at 1 monitoring site [CAY13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37427, Fecal Coliform **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	56103
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	183
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 183 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station CAY13.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37612 **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Twelve of 193 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 209 samples exceeded the geometric mean standard for total coliform (LOEs 19426 and 56107), 3 of 301 samples exceeded the single sample maximum for total coliform (LOEs 19425 and 56105), and 2 of 199 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19445 and 56106) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of 193 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 209 samples exceeded the geometric mean standard for total coliform (LOEs 19426 and 56107), 3 of 301 samples exceeded the single sample maximum for total coliform (LOEs 19425 and 56105), and 2 of 199 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19445 and 56106) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37612, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	56107
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 185 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at station CAY13 .
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37612, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	56104
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	193
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 12 of 193 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos (Old Creek Mouth) was collected at 1 monitoring site [CAY13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37612, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	56106
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	191
Number of Exceedances:	2

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 191 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station CAY13.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37612, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	56105
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	193
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 1 of 193 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos (Old Creek Mouth) was collected at 1 monitoring site [CAY13]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37612, Total Coliform — Region 3

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	19426
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one monitoring site (CAY13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37612, Total Coliform — Region 3

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	19445
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 0 of 108 samples

	exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one monitoring site (CAY13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37612, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Old Creek Mouth)

LOE ID:	19425
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Old Creek Mouth) to determine beneficial use support and results are as follows: 2 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one monitoring site (CAY13)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411

	monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Cayucos (Cayucos Pier)**
Water Body ID: **CAC310160102010041416474 0**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37464** **Region 3**
Pacific Ocean at Cayucos (Cayucos Pier)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Thirteen of 316 samples exceeded the geometric mean standard for enterococcus (LOEs 19419 and 56093) and 25 of 499 samples exceeded the single sample maximum for enterococcus (LOEs 19420 and 56092) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of 316 samples exceeded the geometric mean standard for enterococcus (LOEs 19419 and 56093) and 25 of 499 samples exceeded the single sample maximum for enterococcus (LOEs 19420 and 56092) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37464, Enterococcus **Region 3**
Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID: 19420

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 12 of 112 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37464, Enterococcus **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	19419
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 4 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY14)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37464, Enterococcus **Region 3**
Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID: 56092

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 387
Number of Exceedances: 13

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 13 of 387 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Cayucos (Cayucos Pier) was collected at 2 monitoring sites [CAY14, CAY15]
Temporal Representation: Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37464, Enterococcus **Region 3**
Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID: 56093

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	292
Number of Exceedances:	9
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Nine of the 292 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at stations CAY14 and CAY15 .
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37099 Region 3

Pacific Ocean at Cayucos (Cayucos Pier)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 380 samples exceeded the geometric mean standard for fecal coliform (LOEs 19395 and 56095) and 7 of 488 samples exceeded the single sample maximum for fecal coliform (LOEs 19418 and 56094) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 380 samples exceeded the geometric mean standard for fecal coliform (LOEs 19395 and 56095) and 7 of 488 samples exceeded the single sample maximum for fecal coliform (LOEs 19418 and 56094) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37099, Fecal Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	56095
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	356
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 356 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at stations CAY14 and CAY15 .
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37099, Fecal Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	56094
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	376
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Cayucos (Cayucos Pier) and results are as follows: 2 of 376 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos (Cayucos Pier) was collected at 2 monitoring sites [CAY14, CAY15]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37099, Fecal Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	19418
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 5 of 112 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411

	monitoring site (CAY14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37099, Fecal Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	19395
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37600 **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Twenty nine of 378 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Five of 316 samples exceeded the geometric mean standard for total coliform (LOEs 19447 and 56098), 3 of 485 samples exceeded the single sample maximum for total coliform (LOEs 19446 and 56097), and 2 of 300 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19448 amd 56099) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty nine of 378 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Five of 316 samples exceeded the geometric mean standard for total coliform (LOEs 19447 and 56098), 3 of 485 samples exceeded the single sample maximum for total coliform (LOEs 19446 and 56097), and 2 of 300 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19448 amd 56099) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37600, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	19448
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 2 of 107 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

	Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one monitoring site (CAY14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37600, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	19446
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 2 of 107 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one monitoring site (CAY14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37600, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	19447

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one monitoring site (CAY14)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37600, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	56096
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	378
Number of Exceedances:	29
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 29 of 378 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained

	throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos (Cayucos Pier) was collected at 2 monitoring sites [CAY14, CAY15]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37600, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	56099
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	193
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 193 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at stations CAY14 and CAY15.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37600, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	56098
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	292
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 292 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at stations CAY14 and CAY15 .
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37600, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Pier)

LOE ID:	56097
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	378
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Cayucos (Cayucos Pier) to determine beneficial use support and results are as follows: 1 of 378 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos (Cayucos Pier) was collected at 2 monitoring sites [CAY14, CAY15]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/24/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Cayucos (Cayucos Creek Mouth)**
Water Body ID: **CAC310160102010041417021 7**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36674** **Region 3**
Pacific Ocean at Cayucos (Cayucos Creek Mouth)

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

This sample size for the 30-day geomean for fecal coliform (LOE 19421) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of 24 samples exceeded the geometric mean standard for fecal coliform (LOE 19421) and 7 of 110 samples exceeded the single sample maximum for fecal coliform (LOE 19422) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 24 samples exceeded the geometric mean standard for fecal coliform (LOE 19421) and 7 of 110 samples exceeded the single sample maximum for fecal coliform (LOE 19422) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36674, Fecal Coliform **Region 3**
Pacific Ocean at Cayucos (Cayucos Creek Mouth)

LOE ID: 19421

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Creek Mouth) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY15)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36674, Fecal Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Creek Mouth)

LOE ID:	19422
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Creek Mouth) to determine beneficial use support and results are as follows: 7 of 110 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY15)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID **36913** **Region 3**

Pacific Ocean at Cayucos (Cayucos Creek Mouth)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean standard for total coliform (LOE 19450) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Four of 24 samples exceeded the geometric mean standard for total coliform (LOE 19450), 4 of 110 samples exceeded the single sample maximum for total coliform (LOE 19449), and 3 of 110 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19451) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 24 samples exceeded the geometric mean standard for total coliform (LOE 19450), 4 of 110 samples exceeded the single sample maximum for total coliform (LOE 19449), and 3 of 110 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19451) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36913, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Creek Mouth)

LOE ID:	19449
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Creek Mouth) to determine beneficial use support and results are as follows: 4 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one monitoring site (CAY15)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36913, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Creek Mouth)

LOE ID:	19450
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	4

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Creek Mouth) to determine beneficial use support and results are as follows: 4 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one monitoring site (CAY15)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36913, Total Coliform **Region 3**

Pacific Ocean at Cayucos (Cayucos Creek Mouth)

LOE ID:	19451
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Creek Mouth) to determine beneficial use support and results are as follows: 3 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one monitoring site (CAY15)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37405 **Region 3**

Pacific Ocean at Cayucos (Cayucos Creek Mouth)

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Six of 24 samples exceeded the geometric mean standard for enterococcus (LOE 19423) and 19 of 118 samples exceeded the single sample maximum for enterococcus (LOE 19424) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 24 samples exceeded the geometric mean standard for fecal coliform (LOE 19423) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37405, Enterococcus **Region 3**

Pacific Ocean at Cayucos (Cayucos Creek Mouth)

LOE ID:	19424
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	118
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Creek Mouth) to determine beneficial use support and results are as follows: 19 of 118 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY15)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37405, Enterococcus **Region 3**

Pacific Ocean at Cayucos (Cayucos Creek Mouth)

LOE ID:	19423
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cayucos (Cayucos Creek Mouth) to determine beneficial use support and results are as follows: 6 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cayucos was collected at one AB411 monitoring site (CAY15)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Avila Beach (SLO creek mouth)**
Water Body ID: **CAC310240212010040416222 6**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37023** **Region 3**
Pacific Ocean at Avila Beach (SLO creek mouth)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Thirty eight of 223 samples exceeded the geometric mean standard for enterococcus and 31 of 320 samples exceeded the single sample maximum for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty eight of 223 exceeded the geometric mean standard for enterococcus and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37023, Enterococcus **Region 3**
Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID: 19235

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 6 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one AB411 monitoring site (AB9)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37023, Enterococcus **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	19236
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	111
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 11 of 111 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one AB411 monitoring site (AB9)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37023, Enterococcus **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	56027
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	209
Number of Exceedances:	20
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 20 of 209 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (SLO creek mouth) was collected at 1 monitoring site [AB9]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37023, Enterococcus **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	56028
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	199
Number of Exceedances:	32
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty two of the 199 geomeans exceeded the Enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for Enterococcus states that the Enterococcus density shall not exceed 35 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at AB9.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 36235 Region 3

Pacific Ocean at Avila Beach (SLO creek mouth)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of 207 samples exceeded the geometric mean standard for fecal coliform and 8 of 304 samples exceeded the single sample maximum for fecal coliform (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard.. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 207 samples exceeded the geometric mean standard for fecal coliform and 8 of 304 samples exceeded the single sample maximum for fecal coliform and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36235, Fecal Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	19234
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 6 of 108 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one AB411 monitoring site (AB9)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36235, Fecal Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	19211
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one AB411 monitoring site (AB9)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36235, Fecal Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	56029
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	196
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Avila Beach (SLO creek mouth) and results are as follows: 2 of 196 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (SLO creek mouth) was collected at 1 monitoring site [AB9]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36235, Fecal Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	56035
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	183
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 183 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at AB9.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 36233 **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Seventy six of 197 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Nineteen of 209 samples exceeded the geometric mean standard for total coliform (LOEs 19238 and 56039), 11 of 305 samples exceeded the single sample maximum for total coliform (LOEs 19237 and 56037), and 6 of 301 exceeded the fecal coliform/total coliform ratio criteria (LOEs 19239 and 56038) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy six of 197 samples exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36233, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	56036
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	197
Number of Exceedances:	76
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 76 of 197 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (SLO creek mouth) was

	collected at 1 monitoring site [AB9]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36233, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	56038
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	193
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 193 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at AB9.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam for San Luis Obispo County.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36233, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	56039
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	185
Number of Exceedances:	14
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fourteen of the 180 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at AB9.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36233, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	56037
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	197
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 5 of 197 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (SLO creek mouth) was collected at 1 monitoring site [AB9]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36233, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	19237
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 6 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one monitoring site (AB9)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36233, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	19238
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 5 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005

	AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one monitoring site (AB9)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36233, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (SLO creek mouth)

LOE ID:	19239
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (SLO creek mouth) to determine beneficial use support and results are as follows: 4 of 108 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one monitoring site (AB9)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/28/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Avila Beach (Avila Pier)**
Water Body ID: **CAC310240212010040411584 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36150** **Region 3**
Pacific Ocean at Avila Beach (Avila Pier)

Pollutant: **Enterococcus**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Twenty of 214 samples exceeded geometric mean standard for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) and 21 of 311 samples exceeded the single sample maximum for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty of 214 samples exceeded geometric mean standard for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) and 21 of 311 samples exceeded the single sample maximum for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

Line of Evidence (LOE) for Decision ID 36150, Enterococcus **Region 3**
Pacific Ocean at Avila Beach (Avila Pier)

LOE ID: 19207

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	111
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 10 of 111 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one AB411 monitoring site (AB8)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36150, Enterococcus **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	19206
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 5 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one AB411 monitoring site (AB8)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36150, Enterococcus **Region 3**
Pacific Ocean at Avila Beach (Avila Pier)

LOE ID: 56016

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 190
Number of Exceedances: 15

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Fiffteen of the 190 geomeans exceeded the enterococcus objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at AB8.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36150, Enterococcus **Region 3**
Pacific Ocean at Avila Beach (Avila Pier)

LOE ID: 56015

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 200
Number of Exceedances: 11

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 11 of 200 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 1 monitoring site [AB8]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 36952 Region 3

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 202 samples exceeded geometric mean standard for fecal coliform (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) and 7 of 300 samples exceeded the single sample maximum for fecal coliform (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 202 samples exceeded geometric mean standard for enterococcus and 7 of 300 samples exceeded the single sample maximum for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36952, Fecal Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	19204
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one AB411 monitoring site (AB8)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year and also targets storm water events.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36952, Fecal Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	19205
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110

Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 7 of 110 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one AB411 monitoring site (AB8)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36952, Fecal Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	56017
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	190
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Avila Beach (Avila Pier) and results are as follows: 0 of 190 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 1 monitoring site [AB8]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36952, Fecal Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	56018
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	178
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 178 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at AB8.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 36993 **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Thirty six of 191 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Three of 204 samples exceeded the geometric mean standard for total coliform (LOEs 19209 and 56026), 5 of 301 samples exceeded the single sample maximum for total coliform (LOEs 19208 and 56024), and 3 of 298 exceeded the fecal coliform/total coliform ratio criteria (LOEs 19210 and 56025) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty six of 191 samples exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36993, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	19210
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 2 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one monitoring site (AB8)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36993, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID: 19208

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 110
Number of Exceedances: 5

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 5 of 110 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one monitoring site (AB8)
Temporal Representation: Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36993, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID: 19209

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach was collected at one monitoring site (AB8)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36993, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	56026
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 180 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected at AB8.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36993, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID: 56024

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 191
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 191 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 1 monitoring site [AB8]
Temporal Representation: Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36993, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID: 56025

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	188
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 188 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at AB8.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam for San Luis Obispo County.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36993, Total Coliform **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	56023
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	191
Number of Exceedances:	36
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 36 of 191 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 1 monitoring site [AB8]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 36223 **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36223, Chlorpyrifos **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14853
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Chlorpyrifos is 10,000 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36223, Chlorpyrifos **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14854
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70

	kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Chlorpyrifos is 10000.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID	36283	Region 3
Pacific Ocean at Avila Beach (Avila Pier)		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36283, Diazinon **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14875
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Diazinon is 300.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36283, Diazinon **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14874
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Diazinon is 300 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID **36284** **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data are assessed. This decision has not changed from the 2010 listing cycle.

Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36284, Dieldrin **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14895
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Dieldrin is 2.0 ug/Kg wet weight (Brodberg and Pollock 1999)

Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36284, Dieldrin **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14896
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Dieldrin is 2.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach

	100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 36285 Region 3

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36285, Endosulfan Region 3

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14916
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Endosulfan I.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Endoculfan is 20000.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 36411 Region 3

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36411, Endrin **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14934
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Policy For Developing California's Clean Water Act Section 303(d) List. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency.
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Endrin is 1,000 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36411, Endrin **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14935
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Endrin is 1000.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 37111 Region 3

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37111, Heptachlor epoxide Region 3

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14955
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Heptachlor epoxide.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Total Heptachlor Epoxide is 4.0 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37111, Heptachlor epoxide **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14956
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Heptachlor epoxide.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Heptachlor Epoxide is 4.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 36881 Region 3

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36881, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14976
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Hexachlorobenzene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Hexachlorobenzene is 20.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36881, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14975
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Hexachlorobenzene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for Total Hexachlorobenzene is 20 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID **36882** **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36882, Mirex **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14996
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Mirex.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)

Objective/Criterion Reference:	Water Quality Control Policy For Developing California's Clean Water Act Section 303(d) List. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency.
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the EPA screening value for Mirex is 800 ug/Kg wet weight (USEPA 2000)
Guideline Reference:	Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36882, Mirex **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	15011
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Mirex.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Recommended Screening Values for target analytes - recreational fishers (Table 5-3 in USEPA 2000 (page 5-11)).
Objective/Criterion Reference:	Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA
Evaluation Guideline:	USEPA Screening Value in fish and shellfish tissue for Mirex is 800.0 ug/Kg
Guideline Reference:	Guidance for assessing chemical contaminant data for use in fish advisories. Vol. 1: Fish sampling and analysis. Third Edition. EPA 823-B-00-007. Washington, D.C.: Office of Water, USEPA
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach

	at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 36181 Region 3

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of fifteen sand crab tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36181, Toxaphene Region 3

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	15782
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Toxaphene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	A water segment shall be placed on the section 303(d) list if the tissue pollutant levels in organisms exceed a pollutant-specific evaluation guideline (OEHHA or EPA) using the binomial distribution as described in section 3.1 (Water Quality Control Policy, SWRCB 2004)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	For the protection of human health from the consumption of fish and shellfish, the OEHHA screening value for total Toxaphene is 30 ug/Kg wet weight (Brodberg and Pollock 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36181, Toxaphene **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	15795
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data for Pacific Ocean at Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Toxaphene.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	OEHHA Screening value for the protection of human health from the consumption of fish and shellfish. Brodberg and Pollock calculated "California Lakes Screening Values" for a 70 kg adult human and based on a fish consumption value of 21 g/day (1999)
Objective/Criterion Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Toxaphene is 30.0 ug/Kg
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach 100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

DECISION ID 41529 Region 3

Pacific Ocean at Avila Beach (Avila Pier)

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Fourteen out of fourteen sand crab tissue samples exceeded the evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Fourteen out of fourteen sand crab tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41529, PCBs (Polychlorinated biphenyls) **Region 3**

Pacific Ocean at Avila Beach (Avila Pier)

LOE ID:	14942
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	14
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Sand Crab Tissue Monitoring (SandCrabs) data From fourteen distinct sampling locations along Avila Beach (Avila Pier) to determine beneficial use support and results are as follows: all 14 samples exceed the criterion for total PCBs. In all cased, anachlor 1254 exceded the evaluation guideline and results for anachlors 1248 and 1260 were non-detects.
Data Reference:	Final Data File used for assessment: SWAMP Sand Crab Tissue Data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	OEHHA Screening Value in fish and shellfish tissue for Total PCBs is 20.0 ppb (ug/Kg or ng/g).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Avila Beach (Avila Pier) was collected at 14 monitoring sites [SCS02OOAB001 - Avila Beach at pier, SCS02OOAB002 - Avila Beach at pier, SCS02OOAB003 - Avila Beach 30E of pier, SCS02OOAB004 - Avila Beach 30E of pier, SCS02OOAB005 - Avila Beach 100E of pier, SCS02OOAB006 - Avila Beach 100E of pier, SCS02OOAB007 - Avila Beach 530E of pier, SCS02OOAB008 - Avila Beach 530E of pier, SCS02OOAB009 - Avila Beach 10W of beach, SCS02OOAB010 - Avila Beach 10W of beach, SCS02OOAB011 - Avila Beach 100W of beach, SCS02OOAB012 - Avila Beach

	100W of beach, SCS02OOAB013 - Avila Beach 250W of pier, SCS02OOAB014 - Avila Beach 250W of pier]. Three of these sites are considered independent per the policy, as they are more than 200m apart.
Temporal Representation:	Data was collected on a single day 8/26/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are not included in data submission.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Antonio Reservoir**
Water Body ID: **CAL3098300020080114173957**
Water Body Type: **Lake & Reservoir**

DECISION ID **40437** **Region 3**
San Antonio Reservoir

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.5 of the Listing Policy. Under 4.5 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twelve of the thirty-nine fish tissue samples exceed the evaluation guideline set to protect for the commercial beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twelve of the thirty-nine fish tissue samples exceed the evaluation guideline set to protect for the commercial beneficial use. This exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40437, Mercury **Region 3**
San Antonio Reservoir

LOE ID: 31017

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	36
Number of Exceedances:	9
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Fish were collected for tissue analysis at three locations from San Antonio Reservoir. A total of 36 sample composites were generated from two species: Largemouth Bass (33) and Common Carp (3). Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). A total of 9 out of 36 samples exceeded the OHHEA fish tissue screening value for human health.
Data Reference:	Data associated with report entitled: Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 0.3 mg/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from three locations in San Antonio Reservoir. As discussed in the Lakes and Reserviors Report (SWAMP, 2009), individual sample locations consisted of an area within a given waterbody with an approximate one-mile diameter, from which multiple fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody. Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008" (SWAMP, 2008). Data collected from this waterbody was assigned under Station Name "Lake Nacimiento" in the SWAMP report.
Temporal Representation:	Samples were collected on July 10, 2007
Environmental Conditions:	There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in "Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 40437, Mercury **Region 3**

San Antonio Reservoir

LOE ID:	57766
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Mercury. Composites were generated from largemouth bass (33 composites - 1 fish per composite) and common carp (3 composites â€“ 5 fish per composite) for 3 locations. The composites were averaged for each species per location. The 3 samples for largemouth bass exceeded the criteria. Three common carp composites could not be used in the assessment due to total fish lengths that did not fall within lengths noted in the guideline. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 3 locations. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).

QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51544	Region 3
San Antonio Reservoir		

Pollutant:	**Aldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51544, Aldrin	**Region 3**
San Antonio Reservoir	

LOE ID:	57738
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51544, Aldrin **Region 3**

San Antonio Reservoir

LOE ID:	57737
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51546** **Region 3**

San Antonio Reservoir

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51546, Chlordane **Region 3**

San Antonio Reservoir

LOE ID:	57693
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP)

	Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51546, Chlordane **Region 3**

San Antonio Reservoir

LOE ID:	57690
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor,

	and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51546, Chlordane **Region 3**

San Antonio Reservoir

LOE ID:	57689
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (15 fish per composite) was generated from one species: common

	carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51559**	**Region 3**
San Antonio Reservoir		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline applied to protect for aquatic life beneficial uses but did exceed the evaluation guideline applied to protect for the commercial beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51559, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Antonio Reservoir

LOE ID:	57773
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51559, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Antonio Reservoir

LOE ID:	57774
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008

	Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51559, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Antonio Reservoir

LOE ID:	57772
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring

	Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51547**	**Region 3**
San Antonio Reservoir		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single fish tissue sample did not exceed the evaluation guideline applied to protect for aquatic life beneficial uses but did exceed the evaluation guideline applied to protect for the commercial beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51547, Dieldrin **Region 3**

San Antonio Reservoir

LOE ID:	57694
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51547, Dieldrin **Region 3**

San Antonio Reservoir

LOE ID:	57695
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast

	Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51547, Dieldrin **Region 3**

San Antonio Reservoir

LOE ID:	57696
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dieldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase

	in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51548**	**Region 3**
San Antonio Reservoir		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51548, Endrin **Region 3**

San Antonio Reservoir

LOE ID:	57697
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of

	the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51548, Endrin **Region 3**

San Antonio Reservoir

LOE ID:	57802
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51548, Endrin **Region 3**

San Antonio Reservoir

LOE ID:	57801
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington,

	D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51549**	**Region 3**
San Antonio Reservoir		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51549, Heptachlor **Region 3**

San Antonio Reservoir

LOE ID:	57803
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and

Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51549, Heptachlor **Region 3**

San Antonio Reservoir

LOE ID:	57804
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan

QAPP Information Reference(s):	"Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51551	Region 3
San Antonio Reservoir		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51551, Heptachlor epoxide	Region 3
San Antonio Reservoir	

LOE ID:	57806
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51551, Heptachlor epoxide **Region 3**

San Antonio Reservoir

LOE ID:	57805
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51551, Heptachlor epoxide **Region 3**

San Antonio Reservoir

LOE ID:	57760

Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51552	Region 3
San Antonio Reservoir		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51552, Hexachlorobenzene/ HCB	**Region 3**
San Antonio Reservoir	

LOE ID:	57761
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial

	use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51553**	**Region 3**
San Antonio Reservoir		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51553, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

San Antonio Reservoir

LOE ID:	57765
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51553, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

San Antonio Reservoir

LOE ID:	57763
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51553, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

San Antonio Reservoir

LOE ID:	57764
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled:

	"Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51555**	**Region 3**
San Antonio Reservoir		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was

above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51555, Mirex **Region 3**

San Antonio Reservoir

LOE ID:	57767
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51556**	**Region 3**
San Antonio Reservoir		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51556, PCBs (Polychlorinated biphenyls) **Region 3**

San Antonio Reservoir

LOE ID:	57768
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency

Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51556, PCBs (Polychlorinated biphenyls) **Region 3**

San Antonio Reservoir

LOE ID:	57770
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a

	carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51556, PCBs (Polychlorinated biphenyls) **Region 3**

San Antonio Reservoir

LOE ID:	57769
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

	detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51557**	**Region 3**
San Antonio Reservoir		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51557, Selenium **Region 3**

San Antonio Reservoir

LOE ID:	57771
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs,

	Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51545** **Region 3**

San Antonio Reservoir

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51545, alpha-Endosulfan (Endosulfan 1) **Region 3**

San Antonio Reservoir

LOE ID:	57683
Pollutant:	alpha-Endosulfan (Endosulfan 1)

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51545, alpha-Endosulfan (Endosulfan 1) **Region 3**

San Antonio Reservoir

LOE ID:	57739

Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51545, alpha-Endosulfan (Endosulfan 1) **Region 3**

San Antonio Reservoir

LOE ID:	57684
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for San Antonio Reservoir was collected at 1 monitoring site [Lake San Antonio - 309PSA164]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/10/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Antonio River (below San Antonio Reservoir)**
Water Body ID: **CAR3098100520080114174629**
Water Body Type: **River & Stream**

DECISION ID **39191** **Region 3**
San Antonio River (below San Antonio Reservoir)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Domestic Animals/Livestock | Natural Sources
TMDL Name: San Antonio River FIB TMDL
TMDL Project Code: 1068
Date TMDL Approved by USEPA: 11/30/2011
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Three lines of evidence are available in the administrative record to assess this pollutant. Five of 14 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 12 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 14 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The San Antonio River Fecal Indicator Bacteria TMDL has been approved by USEPA on 11/30/2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water

quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39191, Escherichia coli (E. coli) **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10946
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39191, Escherichia coli (E. coli) **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10947
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39191, Escherichia coli (E. coli) **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51667
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39204** **Region 3**

San Antonio River (below San Antonio Reservoir)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Natural Sources
TMDL Name:	San Antonio River FIB TMDL
TMDL Project Code:	1068
Date TMDL Approved by USEPA:	11/30/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Eleven of 30 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 30 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of 30 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The San Antonio River Fecal Indicator Bacteria TMDL has been approved by USEPA on 11/30/2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39204, Fecal Coliform — Region 3

San Antonio River (below San Antonio Reservoir)

LOE ID:	51651
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39204, Fecal Coliform — Region 3

San Antonio River (below San Antonio Reservoir)

LOE ID:	51669
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39204, Fecal Coliform **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10892
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 10 of 28 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200

	MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39204, Fecal Coliform **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10893
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39637 Region 3

San Antonio River (below San Antonio Reservoir)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 17 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 17 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39637, Ammonia Region 3

San Antonio River (below San Antonio Reservoir)

LOE ID:	51647
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39637, Ammonia **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51688
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39637, Ammonia **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	9607
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39637, Ammonia **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	9606
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39496** **Region 3**

San Antonio River (below San Antonio Reservoir)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39496, Boron **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	9608
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 5/13/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39496, Boron **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51483
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51358	Region 3
San Antonio River (below San Antonio Reservoir)		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data and the single annual mean did not exceed the site specific objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. the single annual mean did not exceed the site specific objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51358, Chloride	**Region 3**
San Antonio River (below San Antonio Reservoir)	

LOE ID:	51671
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2

	samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39497 Region 3

San Antonio River (below San Antonio Reservoir)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39497, Chlorophyll-a Region 3

San Antonio River (below San Antonio Reservoir)

LOE ID:	51689
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39497, Chlorophyll-a **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	9609
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 3/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39205 Region 3

San Antonio River (below San Antonio Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the water quality objectives for municipal and domestic supply (i.e. drinking water) or agricultural supply. Looking only at the most recent three years of data available in the administrative record, zero of the two samples exceed the water quality objective for municipal and domestic supply uses, agricultural supply, and the evaluation guideline for protection of warm freshwater habitats from bio-stimulation and eutrophic conditions. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39205, Nitrate **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	9610
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]

Temporal Representation: Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39205, Nitrate **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID: 9611

Pollutant: Nitrate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 27

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.

Data Reference:
Final Data File used for assessment: CCAMP Salinas Toxicity data
Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference:
Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A
Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]

Temporal Representation: Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39205, Nitrate **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51630
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39205, Nitrate **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51629
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39205, Nitrate **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51649
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39205, Nitrate **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51648
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39205, Nitrate **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51704

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39205, Nitrate **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51690
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51362** **Region 3**

San Antonio River (below San Antonio Reservoir)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51362, Nitrogen, Nitrite **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51631
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	39511	Region 3
San Antonio River (below San Antonio Reservoir)		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 35 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 35 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39511, Oxygen, Dissolved	Region 3
San Antonio River (below San Antonio Reservoir)	

LOE ID:	51706
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39511, Oxygen, Dissolved **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51705
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39511, Oxygen, Dissolved **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	12740
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39511, Oxygen, Dissolved **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	12738
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39511, Oxygen, Dissolved **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	12725
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39511, Oxygen, Dissolved **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	12741
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	51360	Region 3
San Antonio River (below San Antonio Reservoir)		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the two samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and the single annual mean did exceed the site specific objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single annual mean did exceed the site specific objective but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51360, Sodium	**Region 3**
San Antonio River (below San Antonio Reservoir)	

LOE ID:	51686
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Sodium.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39242 Region 3

San Antonio River (below San Antonio Reservoir)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39242, Specific Conductivity **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51484
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39242, Specific Conductivity **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10927
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 7/29/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39242, Specific Conductivity **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10908
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 51361 Region 3

San Antonio River (below San Antonio Reservoir)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the two samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data and the single annual mean did not exceed the site specific objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single annual mean did not exceed the site specific objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51361, Total Dissolved Solids **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51672
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 250 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39207** **Region 3**

San Antonio River (below San Antonio Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 14 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39207, Turbidity **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51708
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39207, Turbidity **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	12755
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39220 **Region 3**

San Antonio River (below San Antonio Reservoir)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. One of the 19 samples exceed the water quality objectives for Warm Freshwater Habitat and Agricultural Supply, and 3 of the 19 samples exceeded the water quality objectives for Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 19 samples exceed the water quality objectives for Warm Freshwater Habitat and Agricultural Supply, and 3 of the 19 samples exceeded the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10909
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10910
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10943
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10925

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10929
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10945
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10928
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10944
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10911
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	10926
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Antonio River(below res) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51707
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51632
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51650
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51670
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39220, pH **Region 3**

San Antonio River (below San Antonio Reservoir)

LOE ID:	51668
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River(below res) was collected at 1 monitoring site [309SAN-San Antonio River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Yerba Buena Creek**
Water Body ID: **CAR309811212008062014095 0**
Water Body Type: **River & Stream**

DECISION ID **38058** **Region 3**
Yerba Buena Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use but none of the 3 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use but none of the 3 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38058, Escherichia coli (E. coli) **Region 3**
Yerba Buena Creek

LOE ID: 18529

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38058, Escherichia coli (E. coli) **Region 3**

Yerba Buena Creek

LOE ID:	18528
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37999 Region 3

Yerba Buena Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37999, Nitrate Region 3

Yerba Buena Creek

LOE ID:	18377
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37834**	**Region 3**
Yerba Buena Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 3 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 3 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 3 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 3 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37834, Oxygen, Dissolved **Region 3**

Yerba Buena Creek

LOE ID:	18136
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37834, Oxygen, Dissolved **Region 3**

Yerba Buena Creek

LOE ID:	18135
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37211**	**Region 3**
Yerba Buena Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 2 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37211, Temperature, water **Region 3**

Yerba Buena Creek

LOE ID:	18575
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **37212** **Region 3**

Yerba Buena Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 2 samples exceed any the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 2 samples exceed any the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37212, pH **Region 3**

Yerba Buena Creek

LOE ID:	18667
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37212, pH **Region 3**

Yerba Buena Creek

LOE ID:	18666
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37212, pH **Region 3**

Yerba Buena Creek

LOE ID:	18665
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37212, pH **Region 3**

Yerba Buena Creek

LOE ID:	18649
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37212, pH **Region 3**

Yerba Buena Creek

LOE ID:	18664
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Yerba Buena Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Yerba Buena Creek was collected at 1 monitoring site [309-YERBA-41 - Yerba Buena Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Woodrow Creek**
Water Body ID: **CAR3041103120080603114858**
Water Body Type: **River & Stream**

DECISION ID	48918	Region 3
Woodrow Creek		

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, this decision will not use this single pore water sample because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero pore water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48918, Chlorpyrifos — Region 3

Woodrow Creek

LOE ID:	58996
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [Woodrow Street Drainage - 304SUP105]
Temporal Representation:	Data was collected on a single day 1/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48918, Chlorpyrifos — Region 3

Woodrow Creek

LOE ID:	58995
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [Woodrow Street Drainage - 304SUP105]
Temporal Representation:	Data was collected on a single day 1/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47360**	**Region 3**
Woodrow Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample (pore water) did not exceed the evaluation guideline (Finlayson, 2004) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Additionally, pore water results will not be the sole basis for any decision.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47360, Diazinon **Region 3**

Woodrow Creek

LOE ID:	58998
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [Woodrow Street Drainage - 304SUP105]
Temporal Representation:	Data was collected on a single day 1/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47360, Diazinon **Region 3**

Woodrow Creek

LOE ID:	58997
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [Woodrow Street Drainage - 304SUP105]
Temporal Representation:	Data was collected on a single day 1/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53517	Region 3
Woodrow Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. The single sample did not exceed the water quality objective for aquatic life protection because they resulted in a significant toxic effect to the test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53517, Toxicity	Region 3
Woodrow Creek	

LOE ID:	80381
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 304SUP105.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53517, Toxicity **Region 3**

Woodrow Creek

LOE ID:	58999
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 304SUP105.
Temporal Representation:	The sample was collected in January 2007.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

DECISION ID	**37213**	**Region 3**
Woodrow Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives for recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37213, Escherichia coli (E. coli)	**Region 3**
Woodrow Creek	

LOE ID:	19903
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 3/15/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37213, Escherichia coli (E. coli) **Region 3**

Woodrow Creek

LOE ID:	19902
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 3/15/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 37216 Region 3

Woodrow Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37216, Nitrate Region 3

Woodrow Creek

LOE ID:	19920
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected over the time period 11/23/1999-11/13/2000.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **37396** **Region 3**

Woodrow Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample exceeded the water quality objectives for both Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample exceeded the water quality objectives for both Cold and Warm Freshwater Habitats. However, this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37396, Oxygen, Dissolved **Region 3**

Woodrow Creek

LOE ID:	19809
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37396, Oxygen, Dissolved **Region 3**

Woodrow Creek

LOE ID:	19810
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **37535** **Region 3**

Woodrow Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37535, Temperature, water **Region 3**

Woodrow Creek

LOE ID:	19202
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan,

	Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 37536 Region 3

Woodrow Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37536, Turbidity Region 3

Woodrow Creek

LOE ID:	19441
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37536, Turbidity **Region 3**

Woodrow Creek

LOE ID:	19442
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 37537 **Region 3**

Woodrow Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37537, pH **Region 3**

Woodrow Creek

LOE ID:	19518
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37537, pH **Region 3**

Woodrow Creek

LOE ID:	19520
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37537, pH **Region 3**

Woodrow Creek

LOE ID:	19521
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37537, pH — Region 3

Woodrow Creek

LOE ID:	19543
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37537, pH — Region 3

Woodrow Creek

LOE ID:	19519
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Woodrow Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Woodrow Creek was collected at 1 monitoring site [304WOM_SCC - WOODROW CR at MOUTH]
Temporal Representation:	Data was collected on a single day 10/15/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Willow Creek (Monterey County)**
Water Body ID: **CAR3080006220080605170334**
Water Body Type: **River & Stream**

DECISION ID **36255** **Region 3**
Willow Creek (Monterey County)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 90 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 90 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 90 samples exceed the water quality objective for unionized ammonia and zero of the 94 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36255, Ammonia **Region 3**
Willow Creek (Monterey County)

LOE ID: 9496

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36255, Ammonia **Region 3**

Willow Creek (Monterey County)

LOE ID:	9497
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36255, Ammonia **Region 3**

Willow Creek (Monterey County)

LOE ID:	52690
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36255, Ammonia **Region 3**

Willow Creek (Monterey County)

LOE ID:	52729
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 52761 **Region 3**

Willow Creek (Monterey County)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the SoCal IBI. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 52761, Benthic Community Effects **Region 3**

Willow Creek (Monterey County)

LOE ID:	58993
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	None of the three IBI scores are 39 or below which is the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in this waterbody resulting in the collection of more than one sample at the Willow Creek station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the 2007 sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The three RWB samples included in this assessment have the following IBI scores: The 2005 sample IBI score was 56, the 2007 sample IBI score was 43, and the 2009 sample IBI score was 52.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or lower are considered to have impaired conditions.

Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 308WLOxxx-Willow Creek at Highway 1
Temporal Representation:	Surveys done on May 4, 2005; April 11, 2007; July 21, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 38946 Region 3

Willow Creek (Monterey County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 93 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 93 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38946, Chlorophyll-a Region 3

Willow Creek (Monterey County)

LOE ID:	9467
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38946, Chlorophyll-a **Region 3**

Willow Creek (Monterey County)

LOE ID:	13029
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 7/7/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38946, Chlorophyll-a **Region 3**

Willow Creek (Monterey County)

LOE ID:	52707
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37012**	**Region 3**
Willow Creek (Monterey County)		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 64 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 27 samples exceed the water quality objective for non-contact recreation.]. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 64 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 27 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37012, Escherichia coli (E. coli) **Region 3**

Willow Creek (Monterey County)

LOE ID:	18416
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308-WILLO-31 - Willow Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37012, Escherichia coli (E. coli) **Region 3**

Willow Creek (Monterey County)

LOE ID:	11158
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 23

samples exceed the criterion for Escherichia coli.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]

Temporal Representation: Data was collected over the time period 2/8/2005-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37012, Escherichia coli (E. coli) Region 3

Willow Creek (Monterey County)

LOE ID: 18417

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.

Data Reference: Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308-WILLO-31 - Willow Creek]
Temporal Representation: Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37012, Escherichia coli (E. coli) Region 3
Willow Creek (Monterey County)

LOE ID: 11157

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 23
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Escherichia coli.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference: Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline: Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference: Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation: Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation: Data was collected over the time period 2/8/2005-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37012, Escherichia coli (E. coli) Region 3
Willow Creek (Monterey County)

LOE ID: 52748

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36395 Region 3

Willow Creek (Monterey County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 91 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 91 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 91 samples exceed the evaluation guideline set to protect for water contact recreation (i.e.

swimming, wading etc.) and 0 of 91 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36395, Fecal Coliform **Region 3**

Willow Creek (Monterey County)

LOE ID:	52747
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36395, Fecal Coliform **Region 3**

Willow Creek (Monterey County)

LOE ID:	52764

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36395, Fecal Coliform **Region 3**

Willow Creek (Monterey County)

LOE ID:	11287
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36395, Fecal Coliform **Region 3**

Willow Creek (Monterey County)

LOE ID:	10982
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36278 Region 3

Willow Creek (Monterey County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 97 nitrate samples and zero of the 38 nitrate/nitrite samples exceed the water quality objective for municipal and domestic supply use (i.e. drinking water). The most recent 38 samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) for the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Zero of the 38 nitrate samples and zero of the 38 nitrate/nitrite samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 97 nitrate samples and zero of the 38 nitrate/nitrite samples exceed the water quality objective for municipal and domestic supply use (i.e. drinking water). Zero of the 38 nitrate samples and zero of the 38 nitrate/nitrite samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36278, Nitrate Region 3

Willow Creek (Monterey County)

LOE ID:	9498

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36278, Nitrate **Region 3**

Willow Creek (Monterey County)

LOE ID:	18302
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Willow Creek (308) to determine beneficial use support and

	results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308-WILLO-31 - Willow Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36278, Nitrate **Region 3**

Willow Creek (Monterey County)

LOE ID:	52745
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36278, Nitrate **Region 3**

Willow Creek (Monterey County)

LOE ID:	52744
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36278, Nitrate **Region 3**

Willow Creek (Monterey County)

LOE ID:	52708
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36278, Nitrate **Region 3**

Willow Creek (Monterey County)

LOE ID:	52709
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36160** **Region 3**

Willow Creek (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 108 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 108 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36160, Oxygen, Dissolved **Region 3**

Willow Creek (Monterey County)

LOE ID:	52710
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36160, Oxygen, Dissolved **Region 3**

Willow Creek (Monterey County)

LOE ID:	52711
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36160, Oxygen, Dissolved **Region 3**

Willow Creek (Monterey County)

LOE ID:	13012
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36160, Oxygen, Dissolved **Region 3**

Willow Creek (Monterey County)

LOE ID:	13031
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36160, Oxygen, Dissolved **Region 3**

Willow Creek (Monterey County)

LOE ID:	13030
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36160, Oxygen, Dissolved **Region 3**

Willow Creek (Monterey County)

LOE ID:	13013
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36160, Oxygen, Dissolved **Region 3**

Willow Creek (Monterey County)

LOE ID:	18053
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308-WILLO-31 - Willow Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 36307 **Region 3**

Willow Creek (Monterey County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 108 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 108 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36307, Temperature, water **Region 3**

Willow Creek (Monterey County)

LOE ID:	13033
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36307, Temperature, water **Region 3**

Willow Creek (Monterey County)

LOE ID:	13015
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36307, Temperature, water **Region 3**

Willow Creek (Monterey County)

LOE ID:	18797
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308-WILLO-31 - Willow Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36307, Temperature, water **Region 3**

Willow Creek (Monterey County)

LOE ID:	52728
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38947** **Region 3**

Willow Creek (Monterey County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 89 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 89 samples exceed the evaluation guideline for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38947, Turbidity **Region 3**

Willow Creek (Monterey County)

LOE ID:	13014
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38947, Turbidity **Region 3**

Willow Creek (Monterey County)

LOE ID:	13032
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38947, Turbidity **Region 3**

Willow Creek (Monterey County)

LOE ID:	52727
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36302 Region 3

Willow Creek (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. Fourteen of the 101 samples exceed the water quality objective for Cold Freshwater Habitat, and 42 of the 101 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-two of the 101 samples exceed the water quality objectives for Drinking Water and Recreation

	and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	52746
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 10 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	52765
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	38
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 10 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	52726
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	52749
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Willow Creek (308) to determine beneficial use support and results are as follows: 10 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-5/13/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	10985
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	54
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 30 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	10984
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 30 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	10983
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Willow Creek (308) to determine beneficial use support and results are as follows: 11 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	11156
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Willow Creek (308) to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	11137
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	Willow Creek (308) to determine beneficial use support and results are as follows: 30 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	11155
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Willow Creek (308) to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	11154
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Willow Creek (308) to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	11138
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	18185
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and

	Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308-WILLO-31 - Willow Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	18184
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308-WILLO-31 - Willow Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	18200
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308-WILLO-31 - Willow Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36302, pH **Region 3**

Willow Creek (Monterey County)

LOE ID:	18201
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308-WILLO-31 - Willow Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 36886 Region 3

Willow Creek (Monterey County)

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applied to the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applied to the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36886, Anthracene Region 3

Willow Creek (Monterey County)

LOE ID:	15702

Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36217 Region 3

Willow Creek (Monterey County)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36217, Arsenic **Region 3**

Willow Creek (Monterey County)

LOE ID:	15789
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36269	Region 3
Willow Creek (Monterey County)		

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36269, Benzo(a)anthracene	**Region 3**
Willow Creek (Monterey County)	

LOE ID:	15843
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36218 Region 3

Willow Creek (Monterey County)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36218, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Willow Creek (Monterey County)

LOE ID:	15469

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36140 Region 3

Willow Creek (Monterey County)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36140, Cadmium **Region 3**

Willow Creek (Monterey County)

LOE ID:	15570
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42628	Region 3
Willow Creek (Monterey County)		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42628, Chlorpyrifos	Region 3
Willow Creek (Monterey County)	

LOE ID:	15648
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36445 Region 3

Willow Creek (Monterey County)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36445, Chromium **Region 3**

Willow Creek (Monterey County)

LOE ID:	16024
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36219** **Region 3**

Willow Creek (Monterey County)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36219, Chrysene (C1-C4) — Region 3

Willow Creek (Monterey County)

LOE ID:	15857
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37074 Region 3

Willow Creek (Monterey County)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37074, Copper Region 3

Willow Creek (Monterey County)

LOE ID:	15942
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42638 Region 3

Willow Creek (Monterey County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment,

interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample (pore water) does not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses, nor will pore water results be the sole basis for any decision. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42638, Diazinon **Region 3**

Willow Creek (Monterey County)

LOE ID:	16821
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42273 Region 3

Willow Creek (Monterey County)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42273, Dieldrin Region 3

Willow Creek (Monterey County)

LOE ID:	16646
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42274 Region 3

Willow Creek (Monterey County)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence

of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42274, Endrin **Region 3**

Willow Creek (Monterey County)

LOE ID:	16466
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36396** **Region 3**

Willow Creek (Monterey County)

Pollutant: **Fluoranthene**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36396, Fluoranthene **Region 3**

Willow Creek (Monterey County)

LOE ID:	16551
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36436 **Region 3**

Willow Creek (Monterey County)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36436, Fluorene **Region 3**

Willow Creek (Monterey County)

LOE ID:	16416
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36322 Region 3

Willow Creek (Monterey County)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36322, Lead **Region 3**

Willow Creek (Monterey County)

LOE ID:	17263
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36488** **Region 3**

Willow Creek (Monterey County)

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36488, Mercury **Region 3**

Willow Creek (Monterey County)

LOE ID:	17333
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36489 Region 3

Willow Creek (Monterey County)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36489, Naphthalene Region 3

Willow Creek (Monterey County)

LOE ID:	17162
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37013 Region 3

Willow Creek (Monterey County)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37013, Nickel **Region 3**

Willow Creek (Monterey County)

LOE ID:	16983
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36228** **Region 3**

Willow Creek (Monterey County)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36228, Phenanthrene **Region 3**

Willow Creek (Monterey County)

LOE ID:	17082
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]

Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36229 Region 3

Willow Creek (Monterey County)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36229, Pyrene Region 3

Willow Creek (Monterey County)

LOE ID:	16964
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001)

	data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38962 Region 3

Willow Creek (Monterey County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. One sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity). The single sample did not exceed the water quality objectives for protection of aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the water quality objectives for protection of aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38962, Toxicity **Region 3**

Willow Creek (Monterey County)

LOE ID:	24719
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36166 Region 3

Willow Creek (Monterey County)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36166, Zinc Region 3

Willow Creek (Monterey County)

LOE ID:	17849
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Willow Creek (308) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Willow Creek (308) was collected at 1 monitoring site [308WLO-Willow Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Wild Cattle Creek**
Water Body ID: **CAR3080006020080605165637**
Water Body Type: **River & Stream**

DECISION ID **38034** **Region 3**
Wild Cattle Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38034, Escherichia coli (E. coli) **Region 3**
Wild Cattle Creek

LOE ID: 18510

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38034, Escherichia coli (E. coli) **Region 3**

Wild Cattle Creek

LOE ID:	18511
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-

	WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38130 Region 3

Wild Cattle Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38130, Nitrate Region 3

Wild Cattle Creek

LOE ID:	18376
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**38051**	**Region 3**
Wild Cattle Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceeded the water quality objectives for dissolved oxygen in both Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 4 samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38051, Oxygen, Dissolved **Region 3**

Wild Cattle Creek

LOE ID:	18154
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38051, Oxygen, Dissolved **Region 3**

Wild Cattle Creek

LOE ID:	18153
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**38052**	**Region 3**
Wild Cattle Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38052, Temperature, water **Region 3**

Wild Cattle Creek

LOE ID:	18836
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38053** **Region 3**

Wild Cattle Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38053, pH **Region 3**

Wild Cattle Creek

LOE ID:	19068
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38053, pH **Region 3**

Wild Cattle Creek

LOE ID:	19067
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38053, pH **Region 3**

Wild Cattle Creek

LOE ID:	19071
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38053, pH **Region 3**

Wild Cattle Creek

LOE ID:	19069
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-

	WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38053, pH **Region 3**

Wild Cattle Creek

LOE ID:	19070
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wild Cattle Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wild Cattle Creek was collected at 1 monitoring site [308-WILDC-31 - Wild Cattle Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Watsonville Creek**
Water Body ID: **CAR3051003020080603171443**
Water Body Type: **River & Stream**

DECISION ID **36734** **Region 3**
Watsonville Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Ten of the 14 samples exceed the water quality objective for Water Contact Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 14 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36734, Escherichia coli (E. coli) **Region 3**
Watsonville Creek

LOE ID: 52806

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36734, Escherichia coli (E. coli) **Region 3**

Watsonville Creek

LOE ID:	11224
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36734, Escherichia coli (E. coli) Region 3

Watsonville Creek

LOE ID:	11223
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36903	Region 3
Watsonville Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eleven of the 14 samples exceed the water quality objective for Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 14 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36903, Fecal Coliform	**Region 3**
Watsonville Creek	

LOE ID:	11221
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36903, Fecal Coliform **Region 3**

Watsonville Creek

LOE ID:	11222
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36903, Fecal Coliform **Region 3**

Watsonville Creek

LOE ID:	52808
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36903, Fecal Coliform **Region 3**

Watsonville Creek

LOE ID:	52805
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37285**	**Region 3**
Watsonville Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. A total of 4058 of the 4482 nitrate samples and 2 of the 2 nitrate/nitrite samples exceed the water quality objective for municipal and domestic supply use (i.e. drinking water). In addition, 2 of the 2 nitrate and 2 of the 2 nitrate/nitrite samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). This water segment is also on the 303(d) List for Low Dissolved Oxygen and this serves as supporting evidence of the occurrence of eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 4058 of the 4482 nitrate samples and 2 of the 2 nitrate/nitrite samples exceed the water quality objective for municipal and domestic supply use and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37285, Nitrate **Region 3**

Watsonville Creek

LOE ID:	52793
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37285, Nitrate **Region 3**

Watsonville Creek

LOE ID:	52762
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37285, Nitrate **Region 3**

Watsonville Creek

LOE ID:	52763
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37285, Nitrate **Region 3**

Watsonville Creek

LOE ID:	52794
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37285, Nitrate **Region 3**

Watsonville Creek

LOE ID:	52669
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37285, Nitrate **Region 3**

Watsonville Creek

LOE ID:	52668
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [

	306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37285, Nitrate **Region 3**

Watsonville Creek

LOE ID:	9392
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37285, Nitrate — Region 3

Watsonville Creek

LOE ID:	17923
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4468
Number of Exceedances:	4046
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 4046 of 4468 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 9 monitoring sites [WC-ACO, WC-ARR, WC-ASR, WC-BWL, WC-CON, WC-ELK, WC-HUD, WC-HUD and WC-LEW].
Temporal Representation:	Data was collected over the time period 1/16/2002-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37109 — Region 3

Watsonville Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. One hundred twenty-five (125) of the 495 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. However, only 44 of the 495 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred twenty-five (125) of the 495 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	17803
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	479
Number of Exceedances:	124
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 124 of 479 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Watsonville Creek was collected at 9 monitoring sites [WC-ACO, WC-ARR, WC-ASR, WC-BWL, WC-CON, WC-ELK, WC-HUD, WC-HUD and WC-LEW].
Temporal Representation: Data was collected over the time period 2/13/2002-2/11/2007.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID: 17804

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 479
Number of Exceedances: 44

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 44 of 479 samples exceed the criterion for Oxygen, Dissolved.
Data Reference: Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A
Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Watsonville Creek was collected at 9 monitoring sites [WC-ACO, WC-ARR, WC-ASR, WC-BWL, WC-CON, WC-ELK, WC-HUD, WC-HUD and WC-LEW].
Temporal Representation: Data was collected over the time period 2/13/2002-2/11/2007.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID: 12804

Pollutant: Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 8/21/2006-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	12787
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	12791
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]

Temporal Representation:	Data was collected over the time period 8/21/2006-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	12770
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	12771

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	12772
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 3 of 12

samples exceed the criterion for Oxygen, Saturation.

Data Reference: Final Data File used for assessment: CCAMP Salinas Toxicity data
Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]

Temporal Representation: Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID: 12805

Pollutant: Dissolved oxygen saturation
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat
Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 8/21/2006-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	12806
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 8/21/2006-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	52686

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	52687
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality

	conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	52777
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37109, Oxygen, Dissolved **Region 3**

Watsonville Creek

LOE ID:	52776
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37454** **Region 3**

Watsonville Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Fifty-six of the 539 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. One hundred thirty-two (132) of the 539 samples exceed the water

quality objectives for Drinking Water and Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One-hundred-thirty-two of the 539 samples exceed the water quality objectives for Drinking Water and Recreation and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	52807
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	52809
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	52778
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	52795
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	52688
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	11260
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected on a single day 8/21/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	11240
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	11264
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected on a single day 8/21/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	11263
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected on a single day 8/21/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	11262
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected on a single day 8/21/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	11261
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected on a single day 8/21/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	17768
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	524
Number of Exceedances:	55
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 55 of 524 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 8 monitoring sites [WC-LEW - Watsonville Creek at Lewis Rd, WC-CON - Watsonville Creek at confluence, WC-HUD - Watsonville Creek at Hudson Landing, WC-ASR - Watsonville Creek Ag Ditch along Salinas Rd, WA-ALF Ag Ditch near RR, Below Warner Lake, Elkhorn Road]
Temporal Representation:	Data was collected over the time period 2/13/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	17767
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	524
Number of Exceedances:	126
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium

	(R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 126 of 524 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 9 monitoring sites [WC-ACO, WC-ARR, WC-ASR, WC-BWL, WC-CON, WC-ELK, WC-HUD, WC-HUD and WC-LEW].
Temporal Representation:	Data was collected over the time period 2/13/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	17766
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	524
Number of Exceedances:	126
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 126 of 524 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 8 monitoring sites [WC-LEW - Watsonville Creek at Lewis Rd, WC-CON - Watsonville Creek at confluence, WC-HUD - Watsonville Creek at Hudson Landing, WC-ASR - Watsonville Creek Ag Ditch along Salinas Rd, WA-ALF Ag Ditch near RR, Below Warner Lake, Elkhorn Road]

Temporal Representation:	Data was collected over the time period 2/13/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	17733
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	524
Number of Exceedances:	126
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 126 of 524 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 9 monitoring sites [WC-ACO, WC-ARR, WC-ASR, WC-BWL, WC-CON, WC-ELK, WC-HUD, WC-HUD and WC-LEW].
Temporal Representation:	Data was collected over the time period 2/13/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	17732
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	524

Number of Exceedances:	55
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 55 of 524 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 8 monitoring sites [WC-LEW - Watsonville Creek at Lewis Rd, WC-CON - Watsonville Creek at confluence, WC-HUD - Watsonville Creek at Hudson Landing, WC-ASR - Watsonville Creek Ag Ditch along Salinas Rd, WA-ALF Ag Ditch near RR, Below Warner Lake, Elkhorn Road]
Temporal Representation:	Data was collected over the time period 2/13/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	11244
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH **Region 3**

Watsonville Creek

LOE ID:	11243
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH — Region 3

Watsonville Creek

LOE ID:	11242
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37454, pH — Region 3

Watsonville Creek

LOE ID:	11241
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12

Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37609**	**Region 3**
Watsonville Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Seven lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 14 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Three LOEs summarize total ammonia data and zero of the 4498 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the water quality objective for unionized ammonia and zero of the 4498 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37609, Ammonia **Region 3**

Watsonville Creek

LOE ID:	17759
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4484
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 4484 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 9 monitoring sites [WC-HUD - Watsonville Creek at Hudson Landing, WC-LEW - Watsonville Creek at Lewis Rd, WC-CON - Watsonville Creek at confluence, WC-ASR - Watsonville Creek Ag Ditch along Salinas Rd, WA-ALF Ag Ditch near RR, Below Warner Lake, Elkhorn Road, Above Confluence]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37609, Ammonia — Region 3

Watsonville Creek

LOE ID:	9390
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37609, Ammonia — Region 3

Watsonville Creek

LOE ID:	9391
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37609, Ammonia **Region 3**

Watsonville Creek

LOE ID:	9389
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37609, Ammonia **Region 3**

Watsonville Creek

LOE ID:	52666
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37609, Ammonia **Region 3**

Watsonville Creek

LOE ID:	52760
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37609, Ammonia **Region 3**

Watsonville Creek

LOE ID:	52791
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37648	Region 3
Watsonville Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37648, Chlorophyll-a **Region 3**

Watsonville Creek

LOE ID:	52761
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37648, Chlorophyll-a **Region 3**

Watsonville Creek

LOE ID:	52667
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37648, Chlorophyll-a **Region 3**

Watsonville Creek

LOE ID:	13041

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37648, Chlorophyll-a **Region 3**

Watsonville Creek

LOE ID:	12769
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37110**	**Region 3**
Watsonville Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-nine of the 497 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-nine of the 497 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37110, Temperature, water **Region 3**

Watsonville Creek

LOE ID:	17655
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	481
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 38 of 481 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 8 monitoring sites [WC-LEW - Watsonville Creek at Lewis Rd, WC-CON - Watsonville Creek at confluence, WC-HUD - Watsonville Creek at Hudson Landing, WC-ASR - Watsonville Creek Ag Ditch along Salinas Rd, WA-ALF Ag Ditch near RR, Below Warner Lake, Elkhorn Road]
Temporal Representation:	Data was collected over the time period 2/13/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37110, Temperature, water **Region 3**

Watsonville Creek

LOE ID:	12790
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37110, Temperature, water **Region 3**

Watsonville Creek

LOE ID:	12807
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 8/21/2006-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37110, Temperature, water **Region 3**

Watsonville Creek

LOE ID:	52780
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37923**	**Region 3**
Watsonville Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Six lines of evidence are available in the administrative record to assess this pollutant. Seventy-eight of the 131 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 78 of the 131 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. However, there is no known documentation of steelhead occurring in Watsonville creek. Therefore the Evaluation Guideline is not applicable for this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The Evaluation Guideline is not applicable for this waterbody.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the Evaluation Guideline is not applicable for this water body.

Line of Evidence (LOE) for Decision ID 37923, Turbidity — Region 3

Watsonville Creek

LOE ID:	17470
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	117
Number of Exceedances:	75
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 75 of 117 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 9 monitoring sites [WC-ACO, WC-ARR, WC-ASR, WC-BWL, WC-CON, WC-ELK, WC-HUD, WC-HUD and WC-LEW].
Temporal Representation:	Data was collected over the time period 9/21/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37923, Turbidity — Region 3

Watsonville Creek

LOE ID:	17485
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	117
Number of Exceedances:	75

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Creek to determine beneficial use support and results are as follows: 75 of 117 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 9 monitoring sites [WC-ACO, WC-ARR, WC-ASR, WC-BWL, WC-CON, WC-ELK, WC-HUD, WC-HUD and WC-LEW].
Temporal Representation:	Data was collected over the time period 9/21/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37923, Turbidity **Region 3**

Watsonville Creek

LOE ID:	12789
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37923, Turbidity **Region 3**

Watsonville Creek

LOE ID:	12788
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37923, Turbidity **Region 3**

Watsonville Creek

LOE ID:	52779
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37923, Turbidity **Region 3**

Watsonville Creek

LOE ID:	52689
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37726**	**Region 3**
Watsonville Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize water samples. Three water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). Zero of the three water samples resulted in a significant toxic effect to one or more test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three water samples resulted in a significant toxic effect to one or more test organisms and therefore do not exceed the water quality objective for aquatic life protection. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37726, Toxicity **Region 3**

Watsonville Creek

LOE ID:	24679
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37726, Toxicity **Region 3**

Watsonville Creek

LOE ID:	24683
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37726, Toxicity **Region 3**

Watsonville Creek

LOE ID:	24729
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37726, Toxicity **Region 3**

Watsonville Creek

LOE ID:	24685
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/15/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37726, Toxicity **Region 3**

Watsonville Creek

LOE ID:	24684
Pollutant:	Plant Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/15/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37726, Toxicity **Region 3**

Watsonville Creek

LOE ID:	24730
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Watsonville Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Creek was collected at 1 monitoring site [306WAC - Watsonville Creek at Hall Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Vicente Creek**
Water Body ID: **CAR3080005220080605164755**
Water Body Type: **River & Stream**

DECISION ID **37316** **Region 3**
Vicente Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37316, Escherichia coli (E. coli) **Region 3**
Vicente Creek

LOE ID: 18458

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37316, Escherichia coli (E. coli) **Region 3**

Vicente Creek

LOE ID:	18459
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-

	VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37165 Region 3

Vicente Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37165, Nitrate Region 3

Vicente Creek

LOE ID:	18270
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37166**	**Region 3**
Vicente Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 4 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 4 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37166, Oxygen, Dissolved **Region 3**

Vicente Creek

LOE ID:	18099
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37166, Oxygen, Dissolved **Region 3**

Vicente Creek

LOE ID:	18100

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37952**	**Region 3**
Vicente Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37952, Temperature, water **Region 3**

Vicente Creek

LOE ID:	18710
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **37953** **Region 3**

Vicente Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed and of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed and of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37953, pH **Region 3**

Vicente Creek

LOE ID:	18926
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37953, pH **Region 3**

Vicente Creek

LOE ID:	18925
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37953, pH **Region 3**

Vicente Creek

LOE ID:	19142
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37953, pH **Region 3**

Vicente Creek

LOE ID:	19158
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37953, pH **Region 3**

Vicente Creek

LOE ID:	19159
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Vicente Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Vicente Creek was collected at 1 monitoring site [308-VICEN-31 - Vicente Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Uvas Creek (below Uvas Reservoir)**
Water Body ID: **CAR3052002120080603163208**
Water Body Type: **River & Stream**

DECISION ID **37628** **Region 3**
Uvas Creek (below Uvas Reservoir)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 17 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 804 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 17 samples exceed the water quality objective for unionized ammonia and zero of the 804 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37628, Ammonia **Region 3**
Uvas Creek (below Uvas Reservoir)

LOE ID: 17776

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	787
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 787 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, CA-H25- Uvas Creek at Highway 25, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37628, Ammonia **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	9346
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37628, Ammonia **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	9377
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37628, Ammonia **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	9347
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36985 **Region 3**

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 10 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 10 samples exceed the Agricultural Supply water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36985, Boron **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	9401
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the

	maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36773 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 10 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 10 samples exceed the Agricultural Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36773, Chloride Region 3

Uvas Creek (below Uvas Reservoir)

LOE ID:	9402

Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38671 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 16 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the

General Water Quality Objective set to protect aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 16 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38671, Chlorophyll-a **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	9399
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 2/19/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38671, Chlorophyll-a **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	9400
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 2/19/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42642** **Region 3**

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. One water sample exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. The other water sample will not be used in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses, however, this sample will also not be used in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing

Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42642, Chlorpyrifos **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	16190
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42642, Chlorpyrifos **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	16191
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42642, Chlorpyrifos **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	16282
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42642, Chlorpyrifos **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	16283
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42643 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42643, Diazinon **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	16706
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42643, Diazinon **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	16855
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42643, Diazinon **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	16854
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42643, Diazinon **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	16705
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37214 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 10 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 10 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26

samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37214, Escherichia coli (E. coli) **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11073
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37214, Escherichia coli (E. coli) **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11072

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36612 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 17 samples exceed the Water Contact Recreation water quality objective and none of the 17 samples exceed the Non-contact Recreation water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 17 samples exceed the Water Contact Recreation water quality objective and none of the 17 samples exceed the Non-Contact Recreation water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36612, Fecal Coliform **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11035
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 3 of 17 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36612, Fecal Coliform **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11051
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37215 **Region 3**

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 825 samples exceed the Municipal & Domestic Supply water quality objective and sixteen of the 825 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-two of the 825 samples exceed the Municipal & Domestic Supply water quality objective and sixteen of the 825 samples exceed the Agricultural Supply water quality objective. Neither exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37215, Nitrate **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17924
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	790
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 16 of 790 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, CA-H25- Uvas Creek at Highway 25, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37215, Nitrate **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17925
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	790
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 22 of 790 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, CA-H25- Uvas Creek at Highway 25, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37215, Nitrate **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13712
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37215, Nitrate **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13697
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies

	(R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37215, Nitrate **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	9348
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37215, Nitrate **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	9349
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36603	Region 3
Uvas Creek (below Uvas Reservoir)		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 10 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 10 samples exceed the Agricultural Supply water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36603, Sodium	**Region 3**
Uvas Creek (below Uvas Reservoir)	

LOE ID:	9403
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37526**	**Region 3**
Uvas Creek (below Uvas Reservoir)		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. Zero of the 644 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Zero of the 644 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37526, Specific Conductivity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13830
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37526, Specific Conductivity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11052
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37526, Specific Conductivity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17509
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	294
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 294 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 5 monitoring sites [UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-152 - Uvas Creek at Highway 152, UV-URB - Uvas Creek below Uvas Reservoir, UV-THO - Uvas Creek at Thomas Rd., at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37526, Specific Conductivity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17852
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	315
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 315 samples exceed the criterion for Conductivity(uS).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 9 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn]
Temporal Representation:	Data was collected over the time period 8/31/2004-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 36805 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 554 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 554 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36805, Temperature, water Region 3

Uvas Creek (below Uvas Reservoir)

LOE ID:	14095
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies

	(R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36805, Temperature, water **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17635
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	518
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 12 of 518 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36805, Temperature, water **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11966
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39255 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollution

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity). The single sediment sample did not result in a significant toxic effect to one or more test organisms.

Six LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). Zero of the two water samples resulted in a significant toxic effect to one or more test organisms.

The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample and neither of the two water samples resulted in a significant toxic effect to one or more test organisms and therefore does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39255, Toxicity — Region 3

Uvas Creek (below Uvas Reservoir)

LOE ID:	24669
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39255, Toxicity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	24674
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth

	(Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue].
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39255, Toxicity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	24668
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39255, Toxicity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	24665
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39255, Toxicity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	24673
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39255, Toxicity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	24672
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39255, Toxicity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	24675
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39255, Toxicity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	24664
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37102 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Seventy-four of 634 samples exceed the Agricultural Supply water quality objective, 57 of 634 samples exceed the Cold and Warm Freshwater Habitat water quality objective and 90 of 634 samples exceed the

numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy-four of 634 samples exceed the Agricultural Supply water quality objective, 57 of 634 samples exceed the Cold and Warm Freshwater Habitat water quality objective and 90 of 634 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11054
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11055
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17926
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	598
Number of Exceedances:	56
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 56 of 598 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17927
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	598
Number of Exceedances:	85
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 85 of 598 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17928
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	598
Number of Exceedances:	85
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 85 of 598 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17929
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	598
Number of Exceedances:	85
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 85 of 598 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17930
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	598
Number of Exceedances:	56
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results

	are as follows: 56 of 598 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17913
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	598
Number of Exceedances:	72
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 72 of 598 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 10 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn, at 101]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13833
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13834

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 1 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13835
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 3 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13836
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 3 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13837
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 3 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13838
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 1 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11053
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11069
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11070
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37102, pH **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11071
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 44855 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Thirty-three of the 87 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. Six of the 87 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-three of the 87 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44855, Oxygen, Dissolved **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	12004
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 1 of 18 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44855, Oxygen, Dissolved **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17780
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	68
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 6 of 68 samples exceed the criterion for Oxygen, Dissolved. A total of 281 measurements were recorded, and of those 6 were below 5.0 mg/L. However multiple measurements were taken on a given day and for those, the lowest value was used for each day.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 5 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-101 - Uvas Creek at Highway 101.
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44855, Oxygen, Dissolved **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	16911
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	68
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 33 of 68 samples exceed the criterion for Oxygen, Dissolved. A total of 281 measurements were recorded, and of those 78 were below 7.0 mg/L. However multiple measurements were taken on a given day and for those, the lowest value was used for each day.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 5 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-101 - Uvas Creek at Highway 101.
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44855, Oxygen, Dissolved **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	12002
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44855, Oxygen, Dissolved **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	12005
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 1 of 18 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44855, Oxygen, Dissolved **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	12003
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38672 Region 3

Uvas Creek (below Uvas Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Eighty-one of the 181 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 81 of the 181 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighty-one of the 181 samples exceed the evaluation guideline for Cold Freshwater Habitat and 81 of the 181 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38672, Turbidity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17449
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	151
Number of Exceedances:	66
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 66 of 151 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 9 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn]
Temporal Representation:	Data was collected over the time period 9/28/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or

fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38672, Turbidity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11965
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38672, Turbidity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	17450
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	151
Number of Exceedances:	66
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 66 of 151 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 9 monitoring sites [UV-THO - Uvas Creek at Thomas Rd., UV-URB - Uvas Creek below Uvas Reservoir, UV-152 - Uvas Creek at Highway 152, UV-BLO - Uvas Creek at Bloomfield Av. Bridge, UV-H25 - Uvas Creek at Highway 25, CA-H25- Uvas Creek at Highway 25, Bonfante Garden Outlet, UV-UCP - Uvas Creek at Canyon County Park, Above Barn]
Temporal Representation:	Data was collected over the time period 9/28/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38672, Turbidity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13683
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 11 of 18 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38672, Turbidity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	11964
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [305UVA-Uvas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38672, Turbidity **Region 3**

Uvas Creek (below Uvas Reservoir)

LOE ID:	13684
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Uvas Creek(below res) to determine beneficial use support and results are as follows: 11 of 18 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Uvas Creek(below res) was collected at 1 monitoring site [Luchessa]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Uvas Creek (above Uvas Reservoir)**
Water Body ID: **CAR3052001020080603162913**
Water Body Type: **River & Stream**

DECISION ID **37138** **Region 3**
Uvas Creek (above Uvas Reservoir)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: No new data were assessed.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant total ammonia. This decision contains all of the LOEs from the previous decision.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 79 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 79 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37138, Ammonia **Region 3**
Uvas Creek (above Uvas Reservoir)

LOE ID: 17799

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	79
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(above res) to determine beneficial use support and results are as follows: 0 of 79 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Uvas Creek(above res) was collected at 1 monitoring site [UV-URA - Uvas Creek above Uvas Reservoir]
Temporal Representation:	Data was collected over the time period 1/7/2003-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37139 Region 3

Uvas Creek (above Uvas Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 79 samples exceed the Municipal & Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 79 samples exceed the Municipal & Domestic Supply water quality objective, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37139, Nitrate **Region 3**

Uvas Creek (above Uvas Reservoir)

LOE ID:	17692
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	79
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(above res) to determine beneficial use support and results are as follows: 0 of 79 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(above res) was collected at 1 monitoring site [UV-URA - Uvas Creek above Uvas Reservoir]
Temporal Representation:	Data was collected over the time period 1/7/2003-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37430 **Region 3**

Uvas Creek (above Uvas Reservoir)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the 69 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 69 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37430, Oxygen, Dissolved **Region 3**

Uvas Creek (above Uvas Reservoir)

LOE ID:	17841
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	69
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(above res) to determine beneficial use support and results are as follows: 3 of 69 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Uvas Creek(above res) was collected at 1 monitoring site [UV-URA - Uvas Creek above Uvas Reservoir]
Temporal Representation:	Data was collected over the time period 1/7/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39245 Region 3

Uvas Creek (above Uvas Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Four of the 20 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 20 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39245, Turbidity Region 3

Uvas Creek (above Uvas Reservoir)

LOE ID:	17521
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(above res) to determine beneficial use support and results are as follows: 4 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Uvas Creek(above res) was collected at 1 monitoring site [UV-URA - Uvas Creek above Uvas Reservoir]
Temporal Representation:	Data was collected over the time period 12/7/2005-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37738 Region 3

Uvas Creek (above Uvas Reservoir)

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. In addition, A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Uvas Creek as having "definite run or population" and specifically cites the following from a 2002 draft DFG report: "Fish upstream .... of the reservoir on Uvas Creek appear to be native strains, but they are resident

rainbow trout, rather than anadromous steelhead." Therefore this temperature guideline is relevant to the waterbody.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of 70 samples exceeded the Cold Freshwater Habitat water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37738, Temperature, water **Region 3**

Uvas Creek (above Uvas Reservoir)

LOE ID:	17399
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	70
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(above res) to determine beneficial use support and results are as follows: 18 of 70 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Uvas Creek(above res) was collected at 1 monitoring site [UV-URA - Uvas Creek above Uvas Reservoir]
Temporal Representation:	Data was collected over the time period 1/7/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

DECISION ID	37204	Region 3
Uvas Creek (above Uvas Reservoir)		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. , Twenty of the 71 samples exceed the Cold Freshwater Habitat water quality objective and 42 of the 71 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37204, pH	**Region 3**
Uvas Creek (above Uvas Reservoir)	

LOE ID:	17555
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	71
Number of Exceedances:	42

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(above res) to determine beneficial use support and results are as follows: 42 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(above res) was collected at 1 monitoring site [UV-URA - Uvas Creek above Uvas Reservoir]
Temporal Representation:	Data was collected over the time period 1/7/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37204, pH **Region 3**

Uvas Creek (above Uvas Reservoir)

LOE ID:	17539
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	71
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(above res) to determine beneficial use support and results are as follows: 20 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(above res) was collected at 1 monitoring site [UV-URA - Uvas Creek above Uvas Reservoir]

Temporal Representation:	Data was collected over the time period 1/7/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37204, pH **Region 3**

Uvas Creek (above Uvas Reservoir)

LOE ID:	17554
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	71
Number of Exceedances:	42
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(above res) to determine beneficial use support and results are as follows: 42 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(above res) was collected at 1 monitoring site [UV-URA - Uvas Creek above Uvas Reservoir]
Temporal Representation:	Data was collected over the time period 1/7/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37204, pH **Region 3**

Uvas Creek (above Uvas Reservoir)

LOE ID:	17553
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	71
Number of Exceedances:	42

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Uvas Creek(above res) to determine beneficial use support and results are as follows: 42 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Uvas Creek(above res) was collected at 1 monitoring site [UV-URA - Uvas Creek above Uvas Reservoir]
Temporal Representation:	Data was collected over the time period 1/7/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Trout Creek (San Luis Obispo County)**
Water Body ID: **CAR309811202008060517182 7**
Water Body Type: **River & Stream**

DECISION ID **37998** **Region 3**
Trout Creek (San Luis Obispo County)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples also exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37998, Escherichia coli (E. coli) **Region 3**
Trout Creek (San Luis Obispo County)

LOE ID: 18292

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37998, Escherichia coli (E. coli) Region 3

Trout Creek (San Luis Obispo County)

LOE ID:	18278
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37126 Region 3

Trout Creek (San Luis Obispo County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample exceed the Water Contact Recreation water quality objective but, did not exceed the Non-Contact Recreation water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceed the Water Contact Recreation water quality objective but, did not exceed the Non-Contact Recreation water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37126, Fecal Coliform Region 3

Trout Creek (San Luis Obispo County)

LOE ID:	17419
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and

	results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37126, Fecal Coliform **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	17405
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-

	TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38107 **Region 3**

Trout Creek (San Luis Obispo County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38107, Nitrate **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	18431
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37230 Region 3

Trout Creek (San Luis Obispo County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 4 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 4 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37230, Oxygen, Dissolved **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	18194
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37230, Oxygen, Dissolved **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	18209

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37247 Region 3

Trout Creek (San Luis Obispo County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37247, Temperature, water **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	18613
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37315 **Region 3**

Trout Creek (San Luis Obispo County)

Pollutant: **pH**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 3 samples exceed the water quality objectives for Agricultural Supply, Cold Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 3 samples exceed the water quality objectives for Agricultural Supply, Cold Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37315, pH **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	18760
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37315, pH **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	18645
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37315, pH **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	18648
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37315, pH **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	18646
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37315, pH **Region 3**

Trout Creek (San Luis Obispo County)

LOE ID:	18647
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Trout Creek (309) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (309) was collected at 1 monitoring site [309-TROUT-41 - Trout Creek at 3 bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Towne Creek**
Water Body ID: **CAR3097009020080604123522**
Water Body Type: **River & Stream**

DECISION ID **37265** **Region 3**
Towne Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 21 samples exceed the Municipal and Domestic Supply water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceed the Municipal and Domestic Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37265, Nitrate **Region 3**
Towne Creek

LOE ID: 13731

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 21
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Towne Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Towne Creek was collected at 1 monitoring site [Small br nr Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/8/2001-2/19/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Toro Canyon Creek**
Water Body ID: **CAR3153401020080612170925**
Water Body Type: **River & Stream**

DECISION ID **44854** **Region 3**
Toro Canyon Creek

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'.

Four lines of evidence are available in the administrative record to assess this pollutant. Eight of 18 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 3 of 18 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 18 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44854, Fecal Coliform **Region 3**
Toro Canyon Creek

LOE ID: 12216

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44854, Fecal Coliform **Region 3**

Toro Canyon Creek

LOE ID:	12217
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Coliform, Fecal.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44854, Fecal Coliform **Region 3**

Toro Canyon Creek

LOE ID:	52478
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44854, Fecal Coliform **Region 3**

Toro Canyon Creek

LOE ID:	52465
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37400 **Region 3**

Toro Canyon Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. For lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 19 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 19 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the water quality objective for unionized ammonia and zero of the 19 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37400, Ammonia — Region 3

Toro Canyon Creek

LOE ID:	10454
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37400, Ammonia **Region 3**

Toro Canyon Creek

LOE ID:	10439
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [

	315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37400, Ammonia **Region 3**

Toro Canyon Creek

LOE ID:	52451
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37400, Ammonia **Region 3**

Toro Canyon Creek

LOE ID:	52480

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**52760**	**Region 3**
Toro Canyon Creek		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample had a score below 40 on the SoCal IBI which indicates poor water quality for this area. However, this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 52760, Benthic Community Effects **Region 3**

Toro Canyon Creek

LOE ID:	58588
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was 39 or lower and therefore is below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315TORxxx-Toro Canyon Creek at Via Real
Temporal Representation:	Surveys done on April 9, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

DECISION ID **39193** **Region 3**

Toro Canyon Creek

Pollutant: **Chlorophyll-a**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 17 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 17 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39193, Chlorophyll-a **Region 3**

Toro Canyon Creek

LOE ID:	52481
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39193, Chlorophyll-a **Region 3**

Toro Canyon Creek

LOE ID:	10455
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48833**	**Region 3**
Toro Canyon Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. One of 7 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 7 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation:	pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48833, Escherichia coli (E. coli) **Region 3**

Toro Canyon Creek

LOE ID:	52466
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37514** **Region 3**

Toro Canyon Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water). This beneficial use is fully supported. The most recent 7 samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). All seven samples exceed the evaluation guideline however, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 19 nitrate samples exceed the water quality objectives for municipal and domestic supply use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. All seven samples exceed the evaluation guideline however, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37514, Nitrate **Region 3**

Toro Canyon Creek

LOE ID:	52462
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37514, Nitrate **Region 3**

Toro Canyon Creek

LOE ID:	52463
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37514, Nitrate **Region 3**

Toro Canyon Creek

LOE ID:	52493
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37514, Nitrate **Region 3**

Toro Canyon Creek

LOE ID:	52482
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37514, Nitrate **Region 3**

Toro Canyon Creek

LOE ID:	10456
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37504**	**Region 3**
Toro Canyon Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information' Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 22 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37504, Oxygen, Dissolved **Region 3**

Toro Canyon Creek

LOE ID:	14230
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37504, Oxygen, Dissolved **Region 3**

Toro Canyon Creek

LOE ID:	14138
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37504, Oxygen, Dissolved **Region 3**

Toro Canyon Creek

LOE ID:	14155
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37504, Oxygen, Dissolved **Region 3**

Toro Canyon Creek

LOE ID:	14229
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]

Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37504, Oxygen, Dissolved **Region 3**

Toro Canyon Creek

LOE ID:	52495
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37504, Oxygen, Dissolved **Region 3**

Toro Canyon Creek

LOE ID:	52494
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**39140**	**Region 3**
Toro Canyon Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Two of the 22 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Two of the 22 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not

exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39140, Turbidity **Region 3**

Toro Canyon Creek

LOE ID:	14231
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39140, Turbidity **Region 3**

Toro Canyon Creek

LOE ID:	14212

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39140, Turbidity **Region 3**

Toro Canyon Creek

LOE ID:	52497
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37527**	**Region 3**
Toro Canyon Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. Zero of the 22 samples exceed the water quality objective for Warm Freshwater Habitat, and 2 of the 22 samples exceed the water quality objectives for Drinking Water and Recreation. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 22 samples exceed the water quality objective for Warm Freshwater Habitat, and 2 of the 22 samples exceed the water quality objectives for Drinking Water and Recreation and these donot exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	52479
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	52464
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	52467
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	52496
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-7/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	12237
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	12218
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	12219
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	12234
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	12273
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Toro Canyon Creek to determine beneficial use support and results are as

	follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	12238
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]

Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	12236
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37527, pH **Region 3**

Toro Canyon Creek

LOE ID:	12235
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 2/14/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42574**	**Region 3**
Toro Canyon Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the water Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, this decision will not use these two samples because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceed the water Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42574, Chlorpyrifos **Region 3**

Toro Canyon Creek

LOE ID:	16202
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]

Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42613 **Region 3**

Toro Canyon Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the water Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the water Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42613, Diazinon **Region 3**

Toro Canyon Creek

LOE ID:	16622
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38646**	**Region 3**
Toro Canyon Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One sample

can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Two samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and neither of the two samples resulted in a significant toxic effect to one or more test organisms and therefore neither exceed the water quality objective for aquatic life protection.

The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples resulted in a significant toxic effect to one or more test organisms and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38646, Toxicity **Region 3**

Toro Canyon Creek

LOE ID:	24661
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38646, Toxicity **Region 3**

Toro Canyon Creek

LOE ID:	24659
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Toro Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Toro Canyon Creek was collected at 1 monitoring site [315TOR-Toro Canyon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Topo Creek**
Water Body ID: **CAR3097007420080604164238**
Water Body Type: **River & Stream**

DECISION ID **36724** **Region 3**
Topo Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: No new data were assessed.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant total ammonia. This decision contains all of the LOEs from the previous decision.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant.

The single sample did not exceed the exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36724, Ammonia **Region 3**
Topo Creek

LOE ID: 10012

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Topo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Topo Creek was collected at 1 monitoring site [309TOP-Topo Creek at Metz Road]
Temporal Representation:	Data was collected on a single day 2/2/1999. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39101**	**Region 3**
Topo Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39101, Chlorophyll-a **Region 3**

Topo Creek

LOE ID:	10026
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Topo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Topo Creek was collected at 1 monitoring site [309TOP-Topo Creek at Metz Road]
Temporal Representation:	Data was collected on a single day 2/2/1999. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39101, Chlorophyll-a **Region 3**

Topo Creek

LOE ID:	10025
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Topo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Topo Creek was collected at 1 monitoring site [309TOP-Topo Creek at Metz Road]

Temporal Representation:	Data was collected on a single day 2/2/1999. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37770 Region 3

Topo Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37770, Fecal Coliform Region 3

Topo Creek

LOE ID:	10842
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Topo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Topo Creek was collected at 1 monitoring site [309TOP-Topo Creek at Metz Road]
Temporal Representation:	Data was collected on a single day 2/2/1999. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37770, Fecal Coliform **Region 3**

Topo Creek

LOE ID:	10841
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Topo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Topo Creek was collected at 1 monitoring site [309TOP-Topo Creek at Metz Road]
Temporal Representation:	Data was collected on a single day 2/2/1999. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37402 Region 3

Topo Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Municipal and Domestic Supply water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Municipal and Domestic Supply water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37402, Nitrate Region 3

Topo Creek

LOE ID:	10027
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Topo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Topo Creek was collected at 1 monitoring site [309TOP-Topo Creek at Metz Road]
Temporal Representation:	Data was collected on a single day 2/2/1999. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Tecolote Creek (Santa Barbara County)**
Water Body ID: **CAR3151001320080612163911**
Water Body Type: **River & Stream**

DECISION ID **36619** **Region 3**
Tecolote Creek (Santa Barbara County)

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 28 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of the 28 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36619, Chloride **Region 3**
Tecolote Creek (Santa Barbara County)

LOE ID: 52368

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36619, Chloride **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	10420
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 11 of 16 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36646 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 28 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-four of the 28 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36646, Sodium Region 3

Tecolote Creek (Santa Barbara County)

LOE ID:	10438
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 14 of 16 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36646, Sodium **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52374
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	10

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36978 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 26 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 28 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the water quality objective for unionized ammonia and zero of the 28 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36978, Ammonia **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	10690
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36978, Ammonia **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	10688
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36978, Ammonia **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	10689
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36978, Ammonia **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52384
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36978, Ammonia **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52375
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36978, Ammonia **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52395
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36697 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 28 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36697, Boron **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52367
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36697, Boron **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	10419
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39347 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One of the 26 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 26 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39347, Chlorophyll-a **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	10421
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39347, Chlorophyll-a **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	10422
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39347, Chlorophyll-a **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52376
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39347, Chlorophyll-a **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52396
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48832 **Region 3**

Tecolote Creek (Santa Barbara County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Two of 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48832, Escherichia coli (E. coli) **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52390
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37441 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. These beneficial uses are fully supported. The most recent 12 samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Eight of the 12 samples exceed the evaluation guideline however, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 28 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Eight of the 12 nitrate samples and 8 of the 12 nitrate / nitrite samples exceed the evaluation guideline for protection of aquatic life from bio-stimulatory or eutrophic effects. However, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations) and therefore these data are not used alone as the

basis of a decision.
5.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded Furthermore, there is no supporting evidence indicating occurrence of, eutrophication.

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52370
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52387

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52386
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52378
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52377
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52371
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52398
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to

	determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52397
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	10436
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37441, Nitrate **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	10437
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	53510	Region 3
Tecolote Creek (Santa Barbara County)		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53510, Nitrogen, Nitrite	**Region 3**
Tecolote Creek (Santa Barbara County)	

LOE ID:	52372
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36785 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. One of the 30 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 30 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 30 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 30 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52380
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52379
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52399
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52400
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14165
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14209
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14208
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14190
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14168
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14167
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14166
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36785, Oxygen, Dissolved **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14189
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37452 **Region 3**

Tecolote Creek (Santa Barbara County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 30 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 30 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37452, Specific Conductivity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12180
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]

Temporal Representation: Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37452, Specific Conductivity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID: 12462

Pollutant: Electrical Conductivity

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 15

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]

Temporal Representation: Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37452, Specific Conductivity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52369
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36649 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30

samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 30 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36649, Temperature, water **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52383
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36649, Temperature, water **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14188
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36649, Temperature, water **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14137
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39332 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Five of the 31 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 5 of the 31 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 31 samples exceed the evaluation guideline for Cold Freshwater Habitat and 5 of the 31 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39332, Turbidity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14187
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39332, Turbidity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14136
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39332, Turbidity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14211
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39332, Turbidity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	14186
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.

Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39332, Turbidity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52402
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39332, Turbidity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52382
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36660 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 30 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat, Agricultural Supply, Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 30 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat, Agricultural Supply, Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52401
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52373

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52381
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52388
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52391
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52393
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12463
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12176
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12215
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12197
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12196
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12195
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12179
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12178
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12198
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12199
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12464
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36660, pH **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12177
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37440 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Six of 28 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 28 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 28 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37440, Fecal Coliform Region 3

Tecolote Creek (Santa Barbara County)

LOE ID:	52392
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37440, Fecal Coliform **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	52389
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tecolote Creek to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37440, Fecal Coliform **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12446
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]

Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37440, Fecal Coliform **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	12461
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42565 **Region 3**

Tecolote Creek (Santa Barbara County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, this decision will not include these two samples because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42565, Chlorpyrifos **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	16201
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42565, Chlorpyrifos **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	16200
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42566 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42566, Diazinon **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	16870
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42566, Diazinon **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	16621
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39331 Region 3

Tecolote Creek (Santa Barbara County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Two samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and neither of the two samples resulted in a significant toxic effect to one or more test organisms and therefore neither exceed the water quality objective for aquatic life protection. The

sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the two samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39331, Toxicity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	24765
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39331, Toxicity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	24778
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39331, Toxicity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	24764
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39331, Toxicity **Region 3**

Tecolote Creek (Santa Barbara County)

LOE ID:	24777
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Tecolote Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tecolote Creek was collected at 1 monitoring site [315TCI-Tecolote Creek at Bacara Resort access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Sycamore Creek**
Water Body ID: **CAR3153201220080612170100**
Water Body Type: **River & Stream**

DECISION ID **37034** **Region 3**
Sycamore Creek

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 23 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of the 23 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37034, Chloride **Region 3**
Sycamore Creek

LOE ID: 10555

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 12 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37034, Chloride **Region 3**

Sycamore Creek

LOE ID:	52532
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36867**	**Region 3**
Sycamore Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Twelve of 22 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 3 of 22 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of 22 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36867, Fecal Coliform **Region 3**

Sycamore Creek

LOE ID:	52624
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36867, Fecal Coliform **Region 3**

Sycamore Creek

LOE ID:	52627
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36867, Fecal Coliform **Region 3**

Sycamore Creek

LOE ID:	12192
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 9 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36867, Fecal Coliform **Region 3**

Sycamore Creek

LOE ID:	12193
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37445 Region 3

Sycamore Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-one of the 23 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-one of the 23 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37445, Sodium Region 3

Sycamore Creek

LOE ID:	10629
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	14

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 14 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37445, Sodium **Region 3**

Sycamore Creek

LOE ID:	52553
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36675**	**Region 3**
Sycamore Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 22 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 23 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 22 samples exceed the water quality objective for unionized ammonia and zero of the 23 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36675, Ammonia **Region 3**

Sycamore Creek

LOE ID:	10538
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36675, Ammonia **Region 3**

Sycamore Creek

LOE ID:	10552
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36675, Ammonia **Region 3**

Sycamore Creek

LOE ID:	10553
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia

	(NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36675, Ammonia **Region 3**

Sycamore Creek

LOE ID:	52645
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36675, Ammonia **Region 3**

Sycamore Creek

LOE ID:	52570
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36675, Ammonia **Region 3**

Sycamore Creek

LOE ID:	52607
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to

	determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	36788	Region 3
Sycamore Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 23 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 23 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36788, Boron **Region 3**

Sycamore Creek

LOE ID:	10554
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36788, Boron **Region 3**

Sycamore Creek

LOE ID:	52531
Pollutant:	Boron

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38627**	**Region 3**
Sycamore Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient

information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 22 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38627, Chlorophyll-a **Region 3**

Sycamore Creek

LOE ID:	10569
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38627, Chlorophyll-a **Region 3**

Sycamore Creek

LOE ID:	10570
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38627, Chlorophyll-a **Region 3**

Sycamore Creek

LOE ID:	52646
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38627, Chlorophyll-a **Region 3**

Sycamore Creek

LOE ID:	52571
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42602** **Region 3**

Sycamore Creek

Pollutant: **Chlorpyrifos**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005), however this decision will not count these two samples because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses, however this decision will not count this sample because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42602, Chlorpyrifos **Region 3**

Sycamore Creek

LOE ID:	47706
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory data method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the listing policy.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [Sycamore Creek at Punta Gorda - 315SCCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42602, Chlorpyrifos **Region 3**

Sycamore Creek

LOE ID:	47703
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory data method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the listing policy.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [Sycamore Creek at Punta Gorda - 315SCCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42602, Chlorpyrifos **Region 3**

Sycamore Creek

LOE ID:	16169
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42602, Chlorpyrifos **Region 3**

Sycamore Creek

LOE ID:	16170
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42593	Region 3
Sycamore Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the evaluation guideline (Finlayson, 2004) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42593, Diazinon	**Region 3**
Sycamore Creek	

LOE ID:	47709
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [Sycamore Creek at Punta Gorda - 315SCCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42593, Diazinon **Region 3**

Sycamore Creek

LOE ID:	47724
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water

	quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [Sycamore Creek at Punta Gorda - 315SCCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42593, Diazinon **Region 3**

Sycamore Creek

LOE ID:	16867
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42593, Diazinon **Region 3**

Sycamore Creek

LOE ID:	16852
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **48831** **Region 3**

Sycamore Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Four of 8 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 8 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48831, Escherichia coli (E. coli) **Region 3**

Sycamore Creek

LOE ID:	52625
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	36848	Region 3
Sycamore Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 23 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. These beneficial uses are fully supported. The most recent eight samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Three of the eight samples exceed the evaluation guideline however, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 23 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4.Three of the eight samples exceed the evaluation guideline however, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36848, Nitrate — Region 3

Sycamore Creek

LOE ID:	10572
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36848, Nitrate — Region 3

Sycamore Creek

LOE ID:	10571
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36848, Nitrate **Region 3**

Sycamore Creek

LOE ID:	52610
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36848, Nitrate **Region 3**

Sycamore Creek

LOE ID:	52609
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36848, Nitrate **Region 3**

Sycamore Creek

LOE ID:	52648
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36848, Nitrate **Region 3**

Sycamore Creek

LOE ID:	52647
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36848, Nitrate **Region 3**

Sycamore Creek

LOE ID:	52550
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36848, Nitrate **Region 3**

Sycamore Creek

LOE ID:	52572
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory

	Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36848, Nitrate **Region 3**

Sycamore Creek

LOE ID:	52573
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36848, Nitrate **Region 3**

Sycamore Creek

LOE ID:	52534
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53509** **Region 3**

Sycamore Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53509, Nitrogen, Nitrite **Region 3**

Sycamore Creek

LOE ID:	52551
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36868 Region 3

Sycamore Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 27 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36868, Specific Conductivity Region 3

Sycamore Creek

LOE ID:	12194
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36868, Specific Conductivity **Region 3**

Sycamore Creek

LOE ID:	12230
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36868, Specific Conductivity **Region 3**

Sycamore Creek

LOE ID:	52533
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37503 Region 3

Sycamore Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 27 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 27 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37503, Temperature, water Region 3

Sycamore Creek

LOE ID:	52592
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37503, Temperature, water **Region 3**

Sycamore Creek

LOE ID:	13925
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37503, Temperature, water **Region 3**

Sycamore Creek

LOE ID:	13948
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	39389	Region 3
Sycamore Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. The single sediment sample did not result in a significant toxic effect to one or more test organisms. Six LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and one water sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in water samples. One of the three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. When the sample count is summed, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not result in toxic effects to one or more test organism, whereas one of the three water samples did result in a significant toxic effect. However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39389, Toxicity	Region 3
Sycamore Creek	

LOE ID:	24742
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39389, Toxicity **Region 3**

Sycamore Creek

LOE ID:	24637
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39389, Toxicity **Region 3**

Sycamore Creek

LOE ID:	24636
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when

	compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39389, Toxicity **Region 3**

Sycamore Creek

LOE ID:	24752
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39389, Toxicity **Region 3**

Sycamore Creek

LOE ID:	80369
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental

Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The samples were collected at station 315SCCxxx.
Temporal Representation:	The samples were collected in January 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39389, Toxicity **Region 3**

Sycamore Creek

LOE ID:	58636
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315SCCxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39389, Toxicity **Region 3**

Sycamore Creek

LOE ID:	58635
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315SCCxxx.
Temporal Representation:	The samples were collected in January 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39389, Toxicity **Region 3**

Sycamore Creek

LOE ID:	80370
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315SCCxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID	**36844**	**Region 3**
Sycamore Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six of the 27 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. However, only 4 of the 27 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 27 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	13926
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	13944
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	13928
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling

	(DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	14207
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	14226
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	14225
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	14224
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	13927
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	52363
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	52589
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	52588
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36844, Oxygen, Dissolved **Region 3**

Sycamore Creek

LOE ID:	52364
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38917** **Region 3**

Sycamore Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Five of the 27 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 5 of the 27 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 27 samples exceed the evaluation guideline for Cold Freshwater Habitat and 5 of the 27 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38917, Turbidity **Region 3**

Sycamore Creek

LOE ID:	52591
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38917, Turbidity **Region 3**

Sycamore Creek

LOE ID:	52366
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38917, Turbidity — Region 3

Sycamore Creek

LOE ID:	13924
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38917, Turbidity — Region 3

Sycamore Creek

LOE ID:	13947
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38917, Turbidity **Region 3**

Sycamore Creek

LOE ID:	13946
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38917, Turbidity **Region 3**

Sycamore Creek

LOE ID:	14228
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36839	Region 3
Sycamore Creek		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. One of the 27 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 2 of the 27 samples exceed the water quality objective for Agricultural Supply, and 5 of the 27 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 27 samples exceed the water quality objectives for Drinking Water and Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36839, pH	**Region 3**
Sycamore Creek	

LOE ID:	12214
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	12213
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	12232
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	12231
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	12229
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	12249
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]

Temporal Representation: Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID: 12212

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 15

Number of Exceedances: 4

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]

Temporal Representation: Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID: 12211

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	12210
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	12233
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	12250
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	12251
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	52611
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	52626
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	52590
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	52628
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	52552
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36839, pH **Region 3**

Sycamore Creek

LOE ID:	52365
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41993** **Region 3**

Sycamore Creek

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41993, Anthracene **Region 3**

Sycamore Creek

LOE ID:	15851
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41993, Anthracene **Region 3**

Sycamore Creek

LOE ID:	15607
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36665** **Region 3**

Sycamore Creek

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36665, Arsenic **Region 3**

Sycamore Creek

LOE ID:	15662
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36665, Arsenic **Region 3**

Sycamore Creek

LOE ID:	15661
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41836** **Region 3**

Sycamore Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41836, Benzo(a)anthracene **Region 3**

Sycamore Creek

LOE ID:	15543
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41836, Benzo(a)anthracene **Region 3**

Sycamore Creek

LOE ID:	15530
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41994** **Region 3**

Sycamore Creek

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41994, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Sycamore Creek

LOE ID:	15391
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41994, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Sycamore Creek

LOE ID:	15392
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	36666	Region 3
Sycamore Creek		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36666, Cadmium	**Region 3**
Sycamore Creek	

LOE ID:	15476
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36666, Cadmium **Region 3**

Sycamore Creek

LOE ID:	15477
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36681** **Region 3**

Sycamore Creek

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36681, Chromium **Region 3**

Sycamore Creek

LOE ID:	15918
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36681, Chromium **Region 3**

Sycamore Creek

LOE ID:	15919
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42543 Region 3

Sycamore Creek

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42543, Chrysene (C1-C4) Region 3

Sycamore Creek

LOE ID:	16001
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42543, Chrysene (C1-C4) **Region 3**

Sycamore Creek

LOE ID:	16002
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36682 Region 3

Sycamore Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36682, Copper Region 3

Sycamore Creek

LOE ID:	16830
Pollutant:	Copper

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36682, Copper **Region 3**

Sycamore Creek

LOE ID:	16829
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42544 Region 3

Sycamore Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42544, Dieldrin Region 3

Sycamore Creek

LOE ID:	16528
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42544, Dieldrin **Region 3**

Sycamore Creek

LOE ID:	16527
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42556**	**Region 3**
Sycamore Creek		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 42556, Endrin **Region 3**

Sycamore Creek

LOE ID:	16375
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42556, Endrin **Region 3**

Sycamore Creek

LOE ID:	16374
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42545**	**Region 3**
Sycamore Creek		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42545, Fluoranthene **Region 3**

Sycamore Creek

LOE ID:	16443
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42545, Fluoranthene **Region 3**

Sycamore Creek

LOE ID:	16444
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42546**	**Region 3**
Sycamore Creek		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42546, Fluorene **Region 3**

Sycamore Creek

LOE ID:	17325
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42546, Fluorene **Region 3**

Sycamore Creek

LOE ID:	17324
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36623**	**Region 3**
Sycamore Creek		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did

not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36623, Lead **Region 3**

Sycamore Creek

LOE ID:	17170
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36623, Lead **Region 3**

Sycamore Creek

LOE ID:	17157
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36624** **Region 3**

Sycamore Creek

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

Conclusion:	the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36624, Mercury **Region 3**

Sycamore Creek

LOE ID:	17223
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36624, Mercury **Region 3**

Sycamore Creek

LOE ID:	17224
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42582** **Region 3**

Sycamore Creek

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42582, Naphthalene **Region 3**

Sycamore Creek

LOE ID:	17058
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42582, Naphthalene **Region 3**

Sycamore Creek

LOE ID:	17059
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37487** **Region 3**

Sycamore Creek

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37487, Nickel **Region 3**

Sycamore Creek

LOE ID:	16890
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37487, Nickel **Region 3**

Sycamore Creek

LOE ID:	16889
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42589	Region 3
Sycamore Creek		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42589, Phenanthrene	**Region 3**
Sycamore Creek	

LOE ID:	17023
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42589, Phenanthrene **Region 3**

Sycamore Creek

LOE ID:	17024
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42592 Region 3

Sycamore Creek

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42592, Pyrene Region 3

Sycamore Creek

LOE ID:	17931
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of

	1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42592, Pyrene **Region 3**

Sycamore Creek

LOE ID:	17917
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36838 Region 3

Sycamore Creek

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36838, Zinc Region 3

Sycamore Creek

LOE ID:	17738
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36838, Zinc **Region 3**

Sycamore Creek

LOE ID:	17739
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Sycamore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Sycamore Creek was collected at 1 monitoring site [315SCC-Sycamore Creek at Punta Gorda Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name:	**Struve Slough**
Water Body ID:	**CAR3051003020080603125227**
Water Body Type:	**River & Stream**

DECISION ID **41907** **Region 3**

Struve Slough

Pollutant:	**Pathogens**
Final Listing Decision:	**Delist from 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Reason for Delisting:	Change from general pollutant to specific pollutant listing (e.g. metals to copper)
TMDL Name:	Watsonville Slough Pathogen
TMDL Project Code:	35
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This decision for the general category of 'Pathogens' is being replaced by individual decisions for each of the Indicator Bacteria for which there are data, such as E. coli and fecal coliform. Those individual decisions replace this generic decision.

This decision for 'Pathogens' was made prior to 2006 and the supporting data and other information are not held in an assessment database. The historic administrative record does not include specific data for this decision. The Lines of Evidence associated with this decision are also associated with decisions for Fecal Coliform and E. coli. those decisions will replace this decision for the generic pollutant category 'Pathogens'.

This conclusion is based on the staff findings that:
1. The data used for the original decision are not available and therefore do not satisfy the data quality requirements of section 6.1.4 of the Policy.
2. The data used for the original decision are not available and therefore do not satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. No data is available to assess the status of this water body for this generic pollutant and newer data for individual pollutants under this general category are available and are assessed in separate decisions.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available for this general category

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision for the general category of 'Pathogens' is being replaced by individual decisions for each of the fecal indicator bacteria for which there are data.

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID: 18522

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 2 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough]
Temporal Representation:	Data was collected over the time period 5/26/2004-7/6/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	14058
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	32
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 32 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 9 monitoring sites [Lee Rd, near Cherry Blossom Drive, near Cherry Blossom Drive, near Cherry Blossom Drive, Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Cherry Blossom Road, Cherry Blossom Drive; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Airport Boulevard, Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	13656
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 11 of 62 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 9 monitoring sites [Lee Rd, near Cherry Blossom Drive, near Cherry Blossom Drive, near Cherry Blossom Drive, Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Cherry Blossom Road, Cherry Blossom Drive; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Airport Boulevard, Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	13655
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	33
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 33 of 62 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 9 monitoring sites [Lee Rd, near Cherry Blossom Drive, near Cherry Blossom Drive, near Cherry Blossom Drive, Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Cherry Blossom Road, Cherry Blossom Drive; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Airport Boulevard, Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	13776

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 14 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 9 monitoring sites [Lee Rd, near Cherry Blossom Drive, near Cherry Blossom Drive, near Cherry Blossom Drive, Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Cherry Blossom Road, Cherry Blossom Drive; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Airport Boulevard, Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	11256
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 14 samples

	exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	18494
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Struve Slough to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road

	junction (DFG Site), 305-STRUV-21 - Struve Slough, 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	11238
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	11237

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	11255
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	18521
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Struve Slough to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 2 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough]
Temporal Representation:	Data was collected over the time period 5/26/2004-7/6/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41907, Pathogens **Region 3**

Struve Slough

LOE ID:	18509
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough, 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **37054** **Region 3**

Struve Slough

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Three beneficial uses are assessed. Nineteen of the 21 samples exceeded the water quality objective for dissolved oxygen in Estuarine and Fish Spawning Habitats, and 68 of the 82 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats, therefore none of these uses are supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Estuarine, Fish Spawning, and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of the 21 samples exceeded the water quality objective for dissolved oxygen in Estuarine and Fish Spawning Habitats, and 68 of the 82 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. All of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	12053
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 12 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	11929
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 11 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	48851
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 20 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	48850
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	21
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to

	determine beneficial use support and results are as follows: 20 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	48849
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 15 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	17873
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Struve Slough to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [SS-LEE - Struve Slough at Lee Rd]
Temporal Representation:	Data was collected over the time period 2/22/2006-1/24/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	48847
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	21
Number of Exceedances:	19

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 19 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	18134
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Struve Slough to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough, 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	18075
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Struve Slough to determine beneficial use support and results are as follows: 20 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-STRUV-21 - Struve Slough, 305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/13/2004-8/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	13632

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Struve Slough to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	13631
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Struve Slough to determine beneficial use support and results are

	as follows: 5 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37054, Oxygen, Dissolved **Region 3**

Struve Slough

LOE ID:	48848
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	21
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 19 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]

Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 37108 Region 3

Struve Slough

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-one lines of evidence are available in the administrative record to assess this pollutant. Three beneficial uses are assessed. Thirty-five of the 120 samples exceed the water quality objective for Warm Freshwater Habitat, and 6 of the 120 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-five of the 120 samples exceed the water quality objective for Warm Freshwater Habitat and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37108, pH Region 3

Struve Slough

LOE ID:	17652
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [SS-LEE - Struve Slough at Lee Rd]
Temporal Representation:	Data was collected over the time period 2/22/2006-1/24/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	17653
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [SS-LEE - Struve Slough at Lee Rd]
Temporal Representation:	Data was collected over the time period 2/22/2006-1/24/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	19049
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough, 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	19050
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough, 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	19051
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Struve Slough to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough, 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	17986
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Struve Slough to determine beneficial use support and results are as follows: 8 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-STRUV-21 - Struve Slough, 305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/13/2004-9/18/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	48852
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	48853
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	21
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for pH.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	17667
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Struve Slough to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [SS-LEE - Struve Slough at Lee Rd]
Temporal Representation:	Data was collected over the time period 2/22/2006-1/24/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	17971
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	23
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Struve Slough to determine beneficial use support and results are as follows: 3 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-STRUV-21 - Struve Slough, 305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/13/2004-9/18/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	17970
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Struve Slough to determine beneficial use support and results are as follows: 3 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-STRUV-21 - Struve Slough, 305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/13/2004-9/18/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	13663
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Harkins Slough Rd., Lee Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/16/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	13662
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Harkins Slough Rd., Lee Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/16/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	13661
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Harkins Slough Rd., Lee Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/16/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	13635
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Struve Slough to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	13634
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	13633
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	11258
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	48854
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 8 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37108, pH **Region 3**

Struve Slough

LOE ID:	11259
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 9 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37108, pH — Region 3

Struve Slough

LOE ID:	11257
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37250 — Region 3

Struve Slough

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant unionized ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One of the 28 samples exceed the water quality objective for unionized ammonia set to protect aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 28 samples exceed the water quality objective for unionized ammonia. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37250, Ammonia **Region 3**

Struve Slough

LOE ID:	9365
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37250, Ammonia **Region 3**

Struve Slough

LOE ID:	48844
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37250, Ammonia **Region 3**

Struve Slough

LOE ID:	13901
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-3/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**53488**	**Region 3**
Struve Slough		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the evaluation guideline (R3 NNE Technical Report, 2010) for Warm Freshwater Habitat and protection of this use from eutrophic conditions. Ant although and there is supporting evidence indicating high risk for, or occurrence of, eutrophication (this water segment is on the 303(d) List for Low Dissolved Oxygen and habitat observations show high density of in stream algal cover and emergent vegetation) the nitrate concentrations are not exceeding the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial

uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 15 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53488, Nitrate **Region 3**

Struve Slough

LOE ID:	48846
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 38918 Region 3

Struve Slough

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Seven of the 42 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 42 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38918, Chlorophyll-a Region 3

Struve Slough

LOE ID:	9178
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38918, Chlorophyll-a **Region 3**

Struve Slough

LOE ID:	13902
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38918, Chlorophyll-a **Region 3**

Struve Slough

LOE ID:	48845
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Chlorophyll a.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**38826**	**Region 3**
Struve Slough		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in sediment samples. Zero of the four sediment samples resulted in a significant toxic effect to one or more test organisms.

Four LOEs summarize water samples. Three water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fourteen total samples are available to assess toxic effects in water samples. Three of the fourteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 14 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38826, Toxicity **Region 3**

Struve Slough

LOE ID:	24786
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38826, Toxicity **Region 3**

Struve Slough

LOE ID:	24763
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected between 2/21/2006 and 9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38826, Toxicity **Region 3**

Struve Slough

LOE ID:	24774
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-

	Struve Slough at Lee Road]
Temporal Representation:	Data was collected on a single day 5/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38826, Toxicity **Region 3**

Struve Slough

LOE ID:	24785
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38826, Toxicity **Region 3**

Struve Slough

LOE ID:	58633
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the three samples exhibited significant toxicity to Hyalella azteca survival. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305STL-Struve Slough at Lee Road.
Temporal Representation:	The samples were collected annualy between April 2007 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38826, Toxicity **Region 3**

Struve Slough

LOE ID:	58632
Pollutant:	Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Three of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The three samples exhibited significant toxicity to Pimephales promelas (survival and growth in the sample from 10/1/08, survival in the sample from 2/6/09 and growth in the sample from 9/29/09). The Sample colelcted on 10/1/08 also exhibited significant toxicity to reproduction of Ceriodaphnia dubia. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305STL-Struve Slough at Lee Road.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version) Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**39151**	**Region 3**
Struve Slough		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 81 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-two of the 81 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39151, Turbidity **Region 3**

Struve Slough

LOE ID:	13718
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 5 of 35 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Lee Rd, Harkins Slough Rd.]

Temporal Representation:	Data was collected over the time period 2/18/2003-7/16/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39151, Turbidity **Region 3**

Struve Slough

LOE ID:	48855
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Struve Slough to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL - Struve Slough at Lee Rd.]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39151, Turbidity **Region 3**

Struve Slough

LOE ID:	12054
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 7/21/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39151, Turbidity **Region 3**

Struve Slough

LOE ID:	16943
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Struve Slough to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [SS-LEE - Struve Slough at Lee Rd]
Temporal Representation:	Data was collected over the time period 2/22/2006-1/24/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39151, Turbidity **Region 3**

Struve Slough

LOE ID:	13651
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Struve Slough to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50492	Region 3
Struve Slough		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Watsonville Slough Pathogen
TMDL Project Code:	35
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This is a new/revised decision to replace the decisions made for the generic pollutant category of 'Pathogen'. This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-four of 71 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 14 of 71 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-four of 71 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 14 of 71 samples exceed the water quality objective for non-contact recreation. Both of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Watsonville Slough Pathogen TMDL has been approved by USEPA on 07/19/2007. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50492, Fecal Coliform	**Region 3**
Struve Slough	

LOE ID:	11237
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50492, Fecal Coliform **Region 3**

Struve Slough

LOE ID:	11238
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50492, Fecal Coliform **Region 3**

Struve Slough

LOE ID:	13776
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 14 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 9 monitoring sites [Lee Rd, near Cherry Blossom Drive, near Cherry Blossom Drive, near Cherry Blossom Drive, Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS

	coordinates were not very accurate, Cherry Blossom Road, Cherry Blossom Drive; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Airport Boulevard, Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50492, Fecal Coliform **Region 3**

Struve Slough

LOE ID:	14058
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	32
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 32 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 9 monitoring sites [Lee Rd, near Cherry Blossom Drive, near Cherry Blossom Drive, near Cherry Blossom Drive, Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Cherry Blossom Road, Cherry Blossom Drive; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Airport Boulevard, Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID **37055** **Region 3**

Struve Slough

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. However, on July 19, 2007 USEPA amended the water quality standards for Watsonville Slough and its tributaries (specifically including Struve Slough) by removing Shellfish Harvesting as a designated use. Concurrent with the submitted Pathogen TMDL, staff submitted a Use Attainability Analysis (UAA) to amend the beneficial use designations. The USEPA approved the UAA on March 28, 2007. After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the beneficial use has been removed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37055, Total Coliform **Region 3**

Struve Slough

LOE ID:	13814
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	54
Number of Exceedances:	49
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 49 of 54 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 9 monitoring sites [Lee Rd, near Cherry Blossom Drive, near Cherry Blossom Drive, near Cherry Blossom Drive, Cherry

	Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Cherry Blossom Road, Cherry Blossom Drive; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Airport Boulevard, Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37055, Total Coliform **Region 3**

Struve Slough

LOE ID:	17422
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Struve Slough to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough, 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37055, Total Coliform **Region 3**

Struve Slough

LOE ID:	17459

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Struve Slough to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 2 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough]
Temporal Representation:	Data was collected over the time period 5/26/2004-7/6/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37055, Total Coliform **Region 3**

Struve Slough

LOE ID:	11239
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	28
Number of Exceedances:	27
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 27 of 28 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50491**	**Region 3**
Struve Slough		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This is a new/revised decision to replace the decisions made for the generic pollutant category of 'Pathogen'. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Thirty-night of 89 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 11 of 89 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-nine of 89 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50491, Escherichia coli (E. coli) **Region 3**

Struve Slough

LOE ID:	13655
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	33
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 33 of 62 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 9 monitoring sites [Lee Rd, near Cherry Blossom Drive, near Cherry Blossom Drive, near Cherry Blossom Drive, Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Cherry Blossom Road, Cherry Blossom Drive; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Airport Boulevard, Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50491, Escherichia coli (E. coli) **Region 3**

Struve Slough

LOE ID:	18494
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Struve Slough to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough, 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50491, Escherichia coli (E. coli) **Region 3**

Struve Slough

LOE ID:	18509
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period

	exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 3 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough, 305-STRUV-22 - Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50491, Escherichia coli (E. coli) Region 3

Struve Slough

LOE ID:	18522
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 2 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough]
Temporal Representation:	Data was collected over the time period 5/26/2004-7/6/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50491, Escherichia coli (E. coli) **Region 3**

Struve Slough

LOE ID:	18521
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Struve Slough to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 2 monitoring sites [305-WSTRU-21 - West Branch of Struve Slough at Harkins Slough Rd/Green Valley Road junction (DFG Site), 305-STRUV-21 - Struve Slough]
Temporal Representation:	Data was collected over the time period 5/26/2004-7/6/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50491, Escherichia coli (E. coli) **Region 3**

Struve Slough

LOE ID:	11256
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50491, Escherichia coli (E. coli) Region 3

Struve Slough

LOE ID:	13656
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Struve Slough to determine beneficial use support and results are as follows: 11 of 62 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 9 monitoring sites [Lee Rd, near Cherry Blossom Drive, near Cherry Blossom Drive, near Cherry Blossom Drive, Cherry Blossom Dr; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Cherry Blossom Road, Cherry Blossom Drive; site coordinates done with spatial data editor in TNTmips because field GPS coordinates were not very accurate, Airport Boulevard, Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50491, Escherichia coli (E. coli) **Region 3**

Struve Slough

LOE ID:	11255
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Struve Slough to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Struve Slough was collected at 1 monitoring site [305STL-Struve Slough at Lee Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Camp Evers Creek**
Water Body ID: **CAR3041204120080603112335**
Water Body Type: **River & Stream**

DECISION ID **48830** **Region 3**
Camp Evers Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Seventy of 87 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy of 87 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48830, Escherichia coli (E. coli) **Region 3**
Camp Evers Creek

LOE ID: 58700

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	33
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty-three of the 50 samples exceeded the E. coli objective.
Data Reference:	Data from San Lorenzo River Estuary Watershed TMDL for Pathogens and the Aptos/Valencia Creek TMDL for Pathogens, May 2000-Aug. 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Central Coast Region Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In waters designated for contact recreation (REC-1), the E. coli concentration shall not exceed 235/100ml. USEPA Ambient Water Quality Criteria for Bacteria -1986
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected from Camp Evers Creek at Carbonera Creek, at Whispering Pines and at Cold Stream Way.
Temporal Representation:	Samples were collected from Carbonera Creek monthly from 2005-2006 and from the other sites monthly from January to February 2005.
Environmental Conditions:	
QAPP Information:	Samples were collected under Quality Assurance Project Plan Assessment of Nonpoint Sources of Beach Contamination Monitoring of Santa Cruz Mainbeach Water Quality Improvements and Related Efforts.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48830, Escherichia coli (E. coli) **Region 3**

Camp Evers Creek

LOE ID:	58687
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	37
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty-seven of the 37 samples exceeded the E. coli geomean objective.
Data Reference:	Data from San Lorenzo River Estuary Watershed TMDL for Pathogens and the Aptos/Valencia Creek TMDL for Pathogens, May 2000-Aug. 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Central Coast Region Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Geometric Mean: In waters designated for contact recreation (REC-1), the E. coli concentration shall not exceed 126/100ml. USEPA Ambient Water Quality Criteria for Bacteria -1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	The samples were collected from Camp Evers Creek at Carbonera Creek, at Whispering Pines and at Cold Stream Way.
Temporal Representation:	Samples were collected from Carbonera Creek monthly from 2005-2006 and from the other sites monthly from January to February 2005.
Environmental Conditions:	
QAPP Information:	Samples were collected under Quality Assurance Project Plan Assessment of Nonpoint Sources of Beach Contamination Monitoring of Santa Cruz Mainbeach Water Quality Improvements and Related Efforts.
QAPP Information Reference(s):	

DECISION ID **37986** **Region 3**

Camp Evers Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant total ammonia. This decision contains all of the LOEs from the previous decision. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37986, Ammonia **Region 3**

Camp Evers Creek

LOE ID:	19686
Pollutant:	Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected on a single day 8/31/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **37881** **Region 3**

Camp Evers Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 108 samples exceed the Municipal & Domestic Supply water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 108 samples exceed the Municipal & Domestic Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37881, Nitrate **Region 3**

Camp Evers Creek

LOE ID:	18605
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 0 of 108 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-10/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the

dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	37893	Region 3
Camp Evers Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Five of the 109 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 109 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 109 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 109 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37893, Oxygen, Dissolved	**Region 3**
Camp Evers Creek	

LOE ID:	19856
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	57
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 25 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 10/19/1993-5/27/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37893, Oxygen, Dissolved **Region 3**

Camp Evers Creek

LOE ID:	19793
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	109
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 5 of 109 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-10/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37893, Oxygen, Dissolved **Region 3**

Camp Evers Creek

LOE ID:	19794
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	109
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 1 of 109 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-10/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37893, Oxygen, Dissolved — Region 3

Camp Evers Creek

LOE ID:	19871
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 25 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 10/19/1993-5/27/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 37308 — Region 3

Camp Evers Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 114 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 114 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37308, Temperature, water **Region 3**

Camp Evers Creek

LOE ID:	19876
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	114
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 0 of 114 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-10/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 37359 Region 3

Camp Evers Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 66 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 66 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37359, Turbidity Region 3

Camp Evers Creek

LOE ID:	19645
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-7/26/2000.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37359, Turbidity **Region 3**

Camp Evers Creek

LOE ID:	19646
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-7/26/2000.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 37146 Region 3

Camp Evers Creek

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Five lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-four of 113 samples exceeded the Warm and Cold Freshwater habitat water quality objectives and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37146, pH Region 3

Camp Evers Creek

LOE ID:	19639
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	113
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 24 of 113 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-10/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37146, pH **Region 3**

Camp Evers Creek

LOE ID:	19643
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	113
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 24 of 113 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-10/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37146, pH **Region 3**

Camp Evers Creek

LOE ID:	19640
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	113
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 4 of 113 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [

	304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-10/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37146, pH **Region 3**

Camp Evers Creek

LOE ID:	19642
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	113
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 4 of 113 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-10/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37146, pH **Region 3**

Camp Evers Creek

LOE ID:	19641
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	113
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Spring Lakes Creek to determine beneficial use support and results are as follows: 4 of 113 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Spring Lakes Creek was collected at 1 monitoring site [304SPL_SCC - SPRING LAKES CR at CARBONERA CR]
Temporal Representation:	Data was collected over the time period 3/25/1992-10/6/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Soberanes Creek**
Water Body ID: **CAR3080001220080605154816**
Water Body Type: **River & Stream**

DECISION ID **37374** **Region 3**
Soberanes Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 4 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 4 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37374, Escherichia coli (E. coli) **Region 3**
Soberanes Creek

LOE ID: 18389

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 4

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37374, Escherichia coli (E. coli) **Region 3**

Soberanes Creek

LOE ID:	18388
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37262 Region 3

Soberanes Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37262, Nitrate Region 3

Soberanes Creek

LOE ID:	18186
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37327**	**Region 3**
Soberanes Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 4 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 4 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37327, Oxygen, Dissolved **Region 3**

Soberanes Creek

LOE ID:	18233
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37327, Oxygen, Dissolved **Region 3**

Soberanes Creek

LOE ID:	18234

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37965**	**Region 3**
Soberanes Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold

Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37965, Temperature, water **Region 3**

Soberanes Creek

LOE ID:	18802
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **37966** **Region 3**

Soberanes Creek

Pollutant: **pH**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the Warm and Cold Freshwater Habitat water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed the Warm and Cold Freshwater Habitat water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37966, pH **Region 3**

Soberanes Creek

LOE ID:	18924
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-

	SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37966, pH **Region 3**

Soberanes Creek

LOE ID:	18922
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37966, pH **Region 3**

Soberanes Creek

LOE ID:	18923
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37966, pH **Region 3**

Soberanes Creek

LOE ID:	18921
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37966, pH **Region 3**

Soberanes Creek

LOE ID:	18962
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soberanes Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soberanes Creek was collected at 1 monitoring site [308-SOBER-31 - Soberanes Creek Bridge Trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Scott Creek**
Water Body ID: **CAR3041102020080602112845**
Water Body Type: **River & Stream**

DECISION ID **37933** **Region 3**
Scott Creek

Pollutant: **Boron**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 105 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 105 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37933, Boron **Region 3**
Scott Creek

LOE ID: 9236

Pollutant: Boron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37933, Boron **Region 3**

Scott Creek

LOE ID:	9228
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37933, Boron **Region 3**

Scott Creek

LOE ID:	52575
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37195 — Region 3

Scott Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37195, Chloride — Region 3

Scott Creek

LOE ID:	9237
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 7 of 49 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37195, Chloride **Region 3**

Scott Creek

LOE ID:	9229
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37195, Chloride **Region 3**

Scott Creek

LOE ID:	52576
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 13 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37185** **Region 3**

Scott Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This decision is being retired because the data associated with this decision were collected from

Conclusion:	stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Six of 128 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 88 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 128 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 88 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) **Region 3**

Scott Creek

LOE ID:	14053
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [

	304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) **Region 3**

Scott Creek

LOE ID:	14069
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) **Region 3**

Scott Creek

LOE ID:	10303
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) **Region 3**

Scott Creek

LOE ID:	10304
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) **Region 3**

Scott Creek

LOE ID:	10208
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) Region 3

Scott Creek

LOE ID:	19884
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected on a single day 8/2/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) Region 3

Scott Creek

LOE ID:	19883
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected on a single day 8/2/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) **Region 3**

Scott Creek

LOE ID:	18353
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) **Region 3**

Scott Creek

LOE ID:	18352
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) **Region 3**

Scott Creek

LOE ID:	10207
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37185, Escherichia coli (E. coli) **Region 3**

Scott Creek

LOE ID:	52348
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 3 of 40 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37297 Region 3

Scott Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Ten of 107 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 1 of 107 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 107 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 107 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37297, Fecal Coliform Region 3

Scott Creek

LOE ID:	52347
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37297, Fecal Coliform **Region 3**

Scott Creek

LOE ID:	52350
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37297, Fecal Coliform **Region 3**

Scott Creek

LOE ID:	10204
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]

Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37297, Fecal Coliform **Region 3**

Scott Creek

LOE ID:	10205
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37297, Fecal Coliform **Region 3**

Scott Creek

LOE ID:	10245

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	52
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 52 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37297, Fecal Coliform **Region 3**

Scott Creek

LOE ID:	10244
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	52
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 7 of 52 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38033 Region 3

Scott Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38033, Sodium Region 3

Scott Creek

LOE ID:	9233
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38033, Sodium **Region 3**

Scott Creek

LOE ID:	9240
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 7 of 49 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38033, Sodium **Region 3**

Scott Creek

LOE ID:	52612
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 12 of 40 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38638 Region 3

Scott Creek

Pollutant:	**Ammonia (Unionized)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 304SCO is located in a newly delineated reach of the creek (Scott Creek Lagoon). The LOEs associated with this decision for Scott Creek are now associated with a new decision for Scott Creek Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Scott Lagoon). The LOEs associated with this decision are now associated with a new decision for Scott Creek Lagoon.

Line of Evidence (LOE) for Decision ID 38638, Ammonia (Unionized) Region 3

Scott Creek

LOE ID:	9211
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38638, Ammonia (Unionized) **Region 3**

Scott Creek

LOE ID:	9235
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42538	Region 3
Scott Creek		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments. No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42538, Anthracene	**Region 3**
Scott Creek	

LOE ID:	15786
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38081**	**Region 3**
Scott Creek		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments. The original decision language is below. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of

the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 38081, Arsenic **Region 3**

Scott Creek

LOE ID:	15597
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42591** **Region 3**

Scott Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments. The original decision language is below. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42591, Benzo(a)anthracene **Region 3**

Scott Creek

LOE ID:	15714
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42550 Region 3
Scott Creek

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42550, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3
Scott Creek

LOE ID:	15563
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37912 Region 3

Scott Creek

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37912, Cadmium Region 3

Scott Creek

LOE ID:	15412
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39345 Region 3

Scott Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 39345, Chlorophyll-a Region 3

Scott Creek

LOE ID:	9230
Pollutant:	Chlorophyll-a

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39345, Chlorophyll-a **Region 3**

Scott Creek

LOE ID:	12118
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39345, Chlorophyll-a **Region 3**

Scott Creek

LOE ID:	9241
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42560**	**Region 3**
Scott Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments. No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single water sample does not exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, this decision will not use the single sample because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42560, Chlorpyrifos **Region 3**

Scott Creek

LOE ID:	16006
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38116 Region 3

Scott Creek

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 38116, Chromium Region 3

Scott Creek

LOE ID:	15870
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42541 Region 3
Scott Creek

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42541, Chrysene (C1-C4) Region 3
Scott Creek

LOE ID:	15939
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37943 Region 3

Scott Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37943, Copper Region 3

Scott Creek

LOE ID:	16778
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42559** **Region 3**

Scott Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Additionally, pore water results will not be the sole basis for any decision.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42559, Diazinon **Region 3**

Scott Creek

LOE ID:	16645
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42553 Region 3
Scott Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42553, Dieldrin Region 3
Scott Creek

LOE ID:	16825
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37200 — Region 3

Scott Creek

Pollutant:	**Electrical Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37200, Electrical Conductivity — Region 3

Scott Creek

LOE ID:	10206

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37200, Electrical Conductivity **Region 3**

Scott Creek

LOE ID:	17647
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results

	are as follows: 0 of 10 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-23 - Lower SC, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37200, Electrical Conductivity **Region 3**

Scott Creek

LOE ID:	17497
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37200, Electrical Conductivity **Region 3**

Scott Creek

LOE ID:	10246
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37200, Electrical Conductivity **Region 3**

Scott Creek

LOE ID:	10267
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37200, Electrical Conductivity **Region 3**

Scott Creek

LOE ID:	19782
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 42594 Region 3

Scott Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42594, Endrin Region 3

Scott Creek

LOE ID:	16546
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37915** **Region 3**

Scott Creek

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 39 samples exceed the Water Contact Recreation water quality objective and none of the samples exceed the Non-Contact Recreation water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 39 samples exceed the Water Contact Recreation water quality objective and none of the samples exceed the Non-Contact Recreation water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37915, Enterococcus **Region 3**

Scott Creek

LOE ID:	14197
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37915, Enterococcus **Region 3**

Scott Creek

LOE ID:	14213

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID 42599 Region 3

Scott Creek

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42599, Fluoranthene Region 3

Scott Creek

LOE ID:	16379
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42600**	**Region 3**
Scott Creek		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42600, Fluorene **Region 3**

Scott Creek

LOE ID:	17260
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37649** **Region 3**

Scott Creek

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37649, Lead **Region 3**

Scott Creek

LOE ID:	17345
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37164** **Region 3**

Scott Creek

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37164, Mercury — Region 3

Scott Creek

LOE ID:	17159
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1].
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42637 Region 3
Scott Creek

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42637, Naphthalene Region 3
Scott Creek

LOE ID:	17244
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37835 Region 3

Scott Creek

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37835, Nickel Region 3

Scott Creek

LOE ID:	17065
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37260 Region 3

Scott Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37260, Nitrate Region 3

Scott Creek

LOE ID:	19668
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37260, Nitrate **Region 3**

Scott Creek

LOE ID:	19652
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37260, Nitrate **Region 3**

Scott Creek

LOE ID:	9238
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37260, Nitrate **Region 3**

Scott Creek

LOE ID:	9239
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37260, Nitrate **Region 3**

Scott Creek

LOE ID:	18147
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37260, Nitrate **Region 3**

Scott Creek

LOE ID:	14014
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37260, Nitrate **Region 3**

Scott Creek

LOE ID:	18131
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37260, Nitrate **Region 3**

Scott Creek

LOE ID:	13978
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37260, Nitrate **Region 3**

Scott Creek

LOE ID:	9231
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37260, Nitrate **Region 3**

Scott Creek

LOE ID:	9232
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed

	in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37474 Region 3
Scott Creek

Pollutant:	**Nitrogen, ammonia (Total Ammonia)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37474, Nitrogen, ammonia (Total Ammonia) Region 3
Scott Creek

LOE ID:	13971
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Scott Creek to determine beneficial use

	support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCT_CCL - Scott Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37474, Nitrogen, ammonia (Total Ammonia) Region 3

Scott Creek

LOE ID:	9234
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37474, Nitrogen, ammonia (Total Ammonia) **Region 3**

Scott Creek

LOE ID:	9210
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **44266** **Region 3**

Scott Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	18081
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	18004
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 4 monitoring sites [304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-23 - Lower SC, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	19726
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support

	and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/24/2002-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	12099
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-

	Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	12064
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	12080
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 9 of 54 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	12084
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	12060
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	12045
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	52631
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44266, Oxygen, Dissolved **Region 3**

Scott Creek

LOE ID:	52632
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Scott Creek to determine beneficial use support and results are as follows: 6 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42570 Region 3

Scott Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42570, Phenanthrene Region 3

Scott Creek

LOE ID:	16959
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42547 Region 3

Scott Creek

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42547, Pyrene Region 3

Scott Creek

LOE ID:	17846
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37901 — Region 3
Scott Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37901, Temperature, water — Region 3
Scott Creek

LOE ID:	19573
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37901, Temperature, water **Region 3**

Scott Creek

LOE ID:	18692
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37901, Temperature, water **Region 3**

Scott Creek

LOE ID:	12102
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-

	Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37901, Temperature, water **Region 3**

Scott Creek

LOE ID:	12083
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37901, Temperature, water **Region 3**

Scott Creek

LOE ID:	12063

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42522**	**Region 3**
Scott Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision	This decision is being retired because the data associated with this decision were collected from

Recommendation: stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42522, Toxicity **Region 3**

Scott Creek

LOE ID:	24761
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39520** **Region 3**

Scott Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 39520, Turbidity **Region 3**

Scott Creek

LOE ID:	12101
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39520, Turbidity **Region 3**

Scott Creek

LOE ID:	12082
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 3 of 47 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39520, Turbidity **Region 3**

Scott Creek

LOE ID:	12062
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39520, Turbidity **Region 3**

Scott Creek

LOE ID:	19325
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/24/2002-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 38231 — Region 3

Scott Creek

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 38231, Zinc — Region 3

Scott Creek

LOE ID:	17952
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37902 Region 3
Scott Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Â‘Scott Creek LagoonÂ’ and/or Â‘Scott Creek (Santa Cruz County)Â’. The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 37902, pH Region 3
Scott Creek

LOE ID:	19097
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10286
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	19907
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the

	dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	19908
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	19909
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	19923
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation: Data was collected over the time period 10/21/1998-5/16/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID: 19098

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat
Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 14
Number of Exceedances: 4

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 4 of 14 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation: Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID: 19099

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	19100
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	19101
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Scott Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 5 monitoring sites [304-SCOTT-25 - Scott Ck. at Hwy 1, 304-SCOTT-22 - Scotts Creek (mid or trib?), 304-SCOTT-23 - Lower SC, 304-SCOTT-21 - Upper Scott Creek, 304-SCOTT-24 - Scott Ck. at Archibald Creek park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10224
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10225
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10226
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither

	be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10227
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH — Region 3

Scott Creek

LOE ID:	10247
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH — Region 3

Scott Creek

LOE ID:	10228
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM-Scott Creek d/s Mill Creek]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/7/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10263
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10264
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10265
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10266
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 54 samples

	exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10287
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-

	Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10283
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10284

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	10285
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Scott Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCO-Scott Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37902, pH **Region 3**

Scott Creek

LOE ID:	19906
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Scott Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Scott Creek was collected at 1 monitoring site [304SCM_SCC - SC0TT CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/21/1998-5/16/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Margarita Creek**
Water Body ID: **CAR3098112120080605171525**
Water Body Type: **River & Stream**

DECISION ID **38223** **Region 3**
Santa Margarita Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation. In addition, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38223, Escherichia coli (E. coli) **Region 3**
Santa Margarita Creek

LOE ID: 17516

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38223, Escherichia coli (E. coli) **Region 3**

Santa Margarita Creek

LOE ID:	17465
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38224 Region 3

Santa Margarita Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for recreational beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives for recreational beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38224, Fecal Coliform Region 3

Santa Margarita Creek

LOE ID:	17624
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38224, Fecal Coliform **Region 3**

Santa Margarita Creek

LOE ID:	17623
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]

Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38563 Region 3

Santa Margarita Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Municipal & Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Municipal & Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38563, Nitrate Region 3

Santa Margarita Creek

LOE ID:	18269
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**38564**	**Region 3**
Santa Margarita Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceeded the water quality objectives for Cold or Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38564, Oxygen, Dissolved **Region 3**

Santa Margarita Creek

LOE ID:	18012
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38564, Oxygen, Dissolved **Region 3**

Santa Margarita Creek

LOE ID:	18011
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**38565**	**Region 3**
Santa Margarita Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective for Cold Freshwater Habitat. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objective for Cold Freshwater Habitat and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation:	No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38565, Temperature, water **Region 3**

Santa Margarita Creek

LOE ID:	18763
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38583** **Region 3**

Santa Margarita Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the Cold and Warm Freshwater Habitat water quality objectives but none of the 4 samples exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed the Cold and Warm Freshwater Habitat water quality objectives but none of the 4 samples exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. In addition, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38583, pH **Region 3**

Santa Margarita Creek

LOE ID:	18063
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38583, pH **Region 3**

Santa Margarita Creek

LOE ID:	18065
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38583, pH **Region 3**

Santa Margarita Creek

LOE ID:	18064
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38583, pH **Region 3**

Santa Margarita Creek

LOE ID:	18066
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38583, pH **Region 3**

Santa Margarita Creek

LOE ID:	18046
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Margarita Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Margarita Creek was collected at 1 monitoring site [309-SMARG-41 - Santa Margarita Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Cruz Harbor**
Water Body ID: **CAB30412053200806171643 40**
Water Body Type: **Bay & Harbor**

DECISION ID **50996** **Region 3**
Santa Cruz Harbor

Pollutant: **Aldrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50996, Aldrin **Region 3**
Santa Cruz Harbor

LOE ID: 58133

Pollutant: Aldrin
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Aldrin. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50996, Aldrin **Region 3**

Santa Cruz Harbor

LOE ID:	58132
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Aldrin. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location.

	The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42005**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. The single shellfish tissue sample did not exceed the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline and zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42005, Cadmium **Region 3**

Santa Cruz Harbor

LOE ID:	15455
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42005, Cadmium — Region 3

Santa Cruz Harbor

LOE ID:	15456
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42005, Cadmium — Region 3

Santa Cruz Harbor

LOE ID:	58142
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in fish tissue is 2.2 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42005, Cadmium **Region 3**

Santa Cruz Harbor

LOE ID:	58141
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004

	Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50997	Region 3
Santa Cruz Harbor		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. When the same two fish tissue samples are evaluated against the evaluation guideline applied to protect for the commercial beneficial use, one out of two samples exceeded the evaluation guideline. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial use, one of out the two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use, and the single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50997, Chlordane **Region 3**

Santa Cruz Harbor

LOE ID:	58147
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50997, Chlordane **Region 3**

Santa Cruz Harbor

LOE ID:	58155
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlordane, Total. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 -

	304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50997, Chlordane **Region 3**

Santa Cruz Harbor

LOE ID:	58148
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50997, Chlordane **Region 3**

Santa Cruz Harbor

LOE ID:	58149
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **48229** **Region 3**

Santa Cruz Harbor

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples and zero out of one shellfish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48229, Chlorpyrifos **Region 3**

Santa Cruz Harbor

LOE ID:	58157
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48229, Chlorpyrifos **Region 3**

Santa Cruz Harbor

LOE ID:	58156
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb.

	This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51096**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. One of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51096, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Cruz Harbor

LOE ID:	58100
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51096, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Cruz Harbor

LOE ID:	58101
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for DDT, Total. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51096, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Santa Cruz Harbor

LOE ID:	58097
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51096, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Cruz Harbor

LOE ID:	58096
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight

	concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47239**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue and zero out of one shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47239, Diazinon **Region 3**

Santa Cruz Harbor

LOE ID:	58164
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in fish tissue is 1,500 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [

	Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47239, Diazinon **Region 3**

Santa Cruz Harbor

LOE ID:	58163
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in shellfish tissue is 2,300 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	

QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50998** **Region 3**

Santa Cruz Harbor

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guidelines. The single shellfish tissue exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish or shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50998, Endosulfan **Region 3**

Santa Cruz Harbor

LOE ID:	58179
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endosulfan. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50998, Endosulfan **Region 3**

Santa Cruz Harbor

LOE ID:	58173
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed

	the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50998, Endosulfan **Region 3**

Santa Cruz Harbor

LOE ID:	58177
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endosulfan. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.

Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50998, Endosulfan **Region 3**

Santa Cruz Harbor

LOE ID:	58178
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endosulfan. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42526**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guidelines. The single shellfish sample did not exceed the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish or shellfish tissue samples exceeded the evaluation guidelines and zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42526, Endrin — Region 3

Santa Cruz Harbor

LOE ID:	58184
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42526, Endrin — Region 3

Santa Cruz Harbor

LOE ID:	58049
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42526, Endrin **Region 3**

Santa Cruz Harbor

LOE ID:	58050
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42526, Endrin **Region 3**

Santa Cruz Harbor

LOE ID:	58185
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.

Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42526, Endrin **Region 3**

Santa Cruz Harbor

LOE ID:	16592
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42526, Endrin **Region 3**

Santa Cruz Harbor

LOE ID:	16591
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	50999	Region 3
Santa Cruz Harbor		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50999, Heptachlor	**Region 3**
Santa Cruz Harbor	

LOE ID:	58052
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the

	criterion for Heptachlor. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50999, Heptachlor **Region 3**

Santa Cruz Harbor

LOE ID:	58051
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Heptachlor. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51000**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. For the commercial beneficial use, the sample count is zero out of zero exceed. These two samples were not used in the assessment because the laboratory data reporting limits were above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of zero shellfish tissue samples exceeded the evaluation guideline. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish or shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51000, Heptachlor epoxide **Region 3**

Santa Cruz Harbor

LOE ID:	58058
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Heptachlor epoxide. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51000, Heptachlor epoxide **Region 3**

Santa Cruz Harbor

LOE ID:	58056
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51000, Heptachlor epoxide **Region 3**

Santa Cruz Harbor

LOE ID:	58057
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Heptachlor epoxide. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51000, Heptachlor epoxide **Region 3**

Santa Cruz Harbor

LOE ID:	58061
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the

	criterion for Heptachlor epoxide. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51001**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No fish or shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51001, Hexachlorobenzene/ HCB **Region 3**

Santa Cruz Harbor

LOE ID:	58063
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Hexachlorobenzene. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support

	Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51001, Hexachlorobenzene/ HCB **Region 3**

Santa Cruz Harbor

LOE ID:	58062
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was

	missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51002** **Region 3**

Santa Cruz Harbor

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guidelines. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish or shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51002, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Cruz Harbor

LOE ID:	58071
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51002, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Cruz Harbor

LOE ID:	58068
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51002, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Cruz Harbor

LOE ID:	58067
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into

	1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51002, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Cruz Harbor

LOE ID:	58066
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42509**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. The single shellfish tissue sample did not exceed the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish or shellfish tissue samples exceeded the evaluation guideline and zero out of six sediment

samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42509, Mercury **Region 3**

Santa Cruz Harbor

LOE ID:	58072
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) with a consumption rate of 21 g/day is 0.20 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42509, Mercury **Region 3**

Santa Cruz Harbor

LOE ID:	58073
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Mercury. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42509, Mercury **Region 3**

Santa Cruz Harbor

LOE ID:	17234
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42509, Mercury **Region 3**

Santa Cruz Harbor

LOE ID:	17221
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51003**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of zero shellfish tissue samples exceeded the evaluation guideline. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero fish and shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51003, Mirex **Region 3**

Santa Cruz Harbor

LOE ID:	58074
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.

Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51003, Mirex **Region 3**

Santa Cruz Harbor

LOE ID:	58077
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51004	Region 3
Santa Cruz Harbor		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples and one out of one shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51004, PAHs (Polycyclic Aromatic Hydrocarbons)	**Region 3**
Santa Cruz Harbor	

LOE ID:	58083
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PAH, Total. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in fish tissue is 0.7 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51004, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Santa Cruz Harbor

LOE ID:	58079
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51095**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No fish or shellfish tissue samples and exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51095, Selenium **Region 3**

Santa Cruz Harbor

LOE ID:	58095
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Selenium. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A

	background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51095, Selenium **Region 3**

Santa Cruz Harbor

LOE ID:	58092
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was

	missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51099	Region 3
Santa Cruz Harbor		

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. Zero of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of zero shellfish tissue samples exceeded the evaluation guideline. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish or shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51099, Toxaphene	Region 3

Santa Cruz Harbor

LOE ID:	58107
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Toxaphene. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in fish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51099, Toxaphene **Region 3**

Santa Cruz Harbor

LOE ID:	58102
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in shellfish tissue is 6.5 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51099, Toxaphene **Region 3**

Santa Cruz Harbor

LOE ID:	58106
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxaphene. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51099, Toxaphene **Region 3**

Santa Cruz Harbor

LOE ID:	58105
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxaphene. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51100**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Tributyltin TBT (Tributylstanne)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Two samples were not used in the assessment because the laboratory data reporting limits were above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single shellfish tissue samples did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish or shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51100, Tributyltin TBT (Tributylstanne) **Region 3**

Santa Cruz Harbor

LOE ID:	58037
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in shellfish tissue is 1 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

	December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51100, Tributyltin TBT (Tributylstanne) Region 3

Santa Cruz Harbor

LOE ID:	58038
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Tributyltin as Sn. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in fish tissue is 0.66 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42577 Region 3

Santa Cruz Harbor

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of three water samples exceeded the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three water samples exceeded the evaluation guideline and zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42577, Zinc — Region 3

Santa Cruz Harbor

LOE ID:	58039
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the CTR value of 81 ug/L for dissolved zinc in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in saline water. The CTR value is 81 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A total of four grab samples were collected from inside the marina basin (Sites 1, 2, 3, & 4), these were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42577, Zinc **Region 3**

Santa Cruz Harbor

LOE ID:	17702
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]

Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42577, Zinc **Region 3**

Santa Cruz Harbor

LOE ID:	17716
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **53216** **Region 3**

Santa Cruz Harbor

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objectives for Marine Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 12 samples exceed the water quality objectives for Marine Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53216, pH **Region 3**

Santa Cruz Harbor

LOE ID:	58091
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 12 minimums and maximums had no exceedences.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Santa Cruz Harbor 1.1 Santa Cruz Harbor 1.2* Santa Cruz Harbor 1.3 Santa Cruz Harbor 2.1 Santa Cruz Harbor 2.2* Santa Cruz Harbor 2.3 Santa Cruz Harbor 3.1 Santa Cruz Harbor 3.2* Santa Cruz Harbor 3.3 Santa Cruz Harbor 4.1 Santa Cruz Harbor 4.2* Santa Cruz Harbor 4.3
Temporal Representation:	Samples were collected once a month from August 2006 to October 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID	**41909**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Arsenic**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two out of two fish tissue samples exceeded the evaluation guideline. The single shellfish tissue sample exceeded the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. For the freshwater habitat and shellfish harvesting beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of two fish tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41909, Arsenic **Region 3**

Santa Cruz Harbor

LOE ID:	58140
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Arsenic. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in fish tissue is 0.0034 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41909, Arsenic **Region 3**

Santa Cruz Harbor

LOE ID:	58134
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41909, Arsenic **Region 3**

Santa Cruz Harbor

LOE ID:	15671
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41909, Arsenic **Region 3**

Santa Cruz Harbor

LOE ID:	15658
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42009**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Copper**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. All three water samples exceed the California Toxics Rule value. However, only one of the 6 sediment samples exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All three water samples exceed the California Toxics Rule value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42009, Copper **Region 3**

Santa Cruz Harbor

LOE ID:	16065
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42009, Copper **Region 3**

Santa Cruz Harbor

LOE ID:	16066
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42009, Copper **Region 3**

Santa Cruz Harbor

LOE ID:	58158
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All of the three samples exceeded the CTR value of 3.1 ug/L for dissolved copper in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to

	fish or wildlife.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in marine waters. CTR value is 3.1 ug/L for dissolved copper in saltwater.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A total of four grab samples were collected from inside the marina basin (Sites 1, 2, 3, & 4), these were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID	42514	Region 3
Santa Cruz Harbor		

Pollutant:	**Dieldrin**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Two of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. These same two fish tissue samples did not exceed the evaluation guideline applied to protect for the freshwater habitat beneficial use. The single shellfish tissue sample exceeded the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. For the shellfish harvesting and freshwater habitat beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of two fish tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42514, Dieldrin **Region 3**

Santa Cruz Harbor

LOE ID:	58165
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: One sample exceeded the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42514, Dieldrin — Region 3

Santa Cruz Harbor

LOE ID:	58171
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42514, Dieldrin — Region 3

Santa Cruz Harbor

LOE ID:	58170
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42514, Dieldrin **Region 3**

Santa Cruz Harbor

LOE ID:	58172
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Dieldrin. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004

	Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42514, Dieldrin **Region 3**

Santa Cruz Harbor

LOE ID:	16742
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42514, Dieldrin **Region 3**

Santa Cruz Harbor

LOE ID:	16741
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	52419	Region 3
Santa Cruz Harbor		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Twelve of the 12 samples exceeded the water quality objective for dissolved oxygen in Marine Habitats and therefore this use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 12 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52419, Oxygen, Dissolved	**Region 3**
Santa Cruz Harbor	

LOE ID:	58078
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Twelve of 12 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Santa Cruz Harbor 1.1 Santa Cruz Harbor 1.2 Santa Cruz Harbor 1.3 Santa Cruz Harbor 2.1 Santa Cruz Harbor 2.2 Santa Cruz Harbor 2.3 Santa Cruz Harbor 3.1 Santa Cruz Harbor 3.2 Santa Cruz Harbor 3.3 Santa Cruz Harbor 4.1 Santa Cruz Harbor 4.2 Santa Cruz Harbor 4.3
Temporal Representation:	Samples were collected once a month from August 2006 to October 2006
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID	**51005**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial use. The single shellfish tissue sample exceeded the evaluation guideline. For the freshwater habitat and shellfish harvesting beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of two fish tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 51005, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Cruz Harbor

LOE ID:	58084
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: The one sample did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 304SCRZ10. The sample for station 304SCRZ23 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 51005, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Cruz Harbor

LOE ID:	58085
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PCB, Total. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51005, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Cruz Harbor

LOE ID:	58089
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PCB, Total. A composite consisting of 3 stary flounders was generated for one location and a composite of 36 speckled sanddabs was generated for a second location. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51005, PCBs (Polychlorinated biphenyls) Region 3

Santa Cruz Harbor

LOE ID:	58090
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for PCB, Total. A composite consisting of 3 stary flounders was generated for one

	location and a composite of 36 speckled sanddabs was generated for a second location. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 2 monitoring sites [Santa Cruz Harbor random site 2 - 304SCRZ02, Santa Cruz Harbor random site 7 - 304SCRZ07]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42362**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42362, Anthracene **Region 3**

Santa Cruz Harbor

LOE ID:	15847
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42362, Anthracene — Region 3

Santa Cruz Harbor

LOE ID:	15846
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41953 — Region 3

Santa Cruz Harbor

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41953, Benzo(a)anthracene **Region 3**

Santa Cruz Harbor

LOE ID:	15724
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41953, Benzo(a)anthracene **Region 3**

Santa Cruz Harbor

LOE ID:	15723
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	41952	Region 3
Santa Cruz Harbor		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41952, Benzo(a)pyrene (3,4-Benzopyrene -7-d)	**Region 3**
Santa Cruz Harbor	

LOE ID:	15355
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41952, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Santa Cruz Harbor

LOE ID:	15594
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41956** **Region 3**

Santa Cruz Harbor

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41956, Chromium **Region 3**

Santa Cruz Harbor

LOE ID:	15898
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41956, Chromium **Region 3**

Santa Cruz Harbor

LOE ID:	15897
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42008** **Region 3**

Santa Cruz Harbor

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42008, Chrysene (C1-C4) **Region 3**

Santa Cruz Harbor

LOE ID:	15983
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42008, Chrysene (C1-C4) **Region 3**

Santa Cruz Harbor

LOE ID:	15982
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42516** **Region 3**

Santa Cruz Harbor

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42516, Fluoranthene **Region 3**

Santa Cruz Harbor

LOE ID:	16439
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42516, Fluoranthene **Region 3**

Santa Cruz Harbor

LOE ID:	16438
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42517	Region 3
Santa Cruz Harbor		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42517, Fluorene	**Region 3**
Santa Cruz Harbor	

LOE ID:	16861
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluorene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42517, Fluorene **Region 3**

Santa Cruz Harbor

LOE ID:	16613
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42529** **Region 3**

Santa Cruz Harbor

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42529, Lead **Region 3**

Santa Cruz Harbor

LOE ID:	17137

Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42529, Lead **Region 3**

Santa Cruz Harbor

LOE ID:	17136
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0

	of 6 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**44168**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to

determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44168, Naphthalene **Region 3**

Santa Cruz Harbor

LOE ID:	17287
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44168, Naphthalene **Region 3**

Santa Cruz Harbor

LOE ID:	17288

Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42518**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42518, Nickel **Region 3**

Santa Cruz Harbor

LOE ID:	17122
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor,

	304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42518, Nickel **Region 3**

Santa Cruz Harbor

LOE ID:	17123
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42519** **Region 3**

Santa Cruz Harbor

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42519, Phenanthrene **Region 3**

Santa Cruz Harbor

LOE ID:	16955
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42519, Phenanthrene **Region 3**

Santa Cruz Harbor

LOE ID:	16956
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa

	Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42536 Region 3

Santa Cruz Harbor

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42536, Pyrene Region 3

Santa Cruz Harbor

LOE ID:	17086
Pollutant:	Pyrene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42536, Pyrene **Region 3**

Santa Cruz Harbor

LOE ID:	17073
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Pyrene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42373**	**Region 3**
Santa Cruz Harbor		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize sediment samples. Six sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity). Zero of the six sediment samples resulted in a significant toxic effect to one or more test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the six sediment samples exceed the water quality objectives for protection of aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42373, Toxicity **Region 3**

Santa Cruz Harbor

LOE ID:	24354
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42373, Toxicity **Region 3**

Santa Cruz Harbor

LOE ID:	24355
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Cruz Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Cruz Harbor was collected at 6 monitoring sites [304SCRZ23 - Santa Cruz Harbor, 304SCRZ07 - Santa Cruz Harbor, 304SCRZ15 - Santa Cruz Harbor, 304SCRZ18 - Santa Cruz Harbor, 304SCRZ02 - Santa Cruz Harbor, 304SCRZ10 - Santa Cruz Harbor]
Temporal Representation:	Data was collected on a single day 6/23/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Barbara Harbor**
Water Body ID: **CAB31532011200806171653 48**
Water Body Type: **Bay & Harbor**

DECISION ID **50753** **Region 3**
Santa Barbara Harbor

Pollutant: **Aldrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50753, Aldrin **Region 3**
Santa Barbara Harbor

LOE ID: 57967

Pollutant: Aldrin
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50753, Aldrin **Region 3**

Santa Barbara Harbor

LOE ID:	57968
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and

	homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42477**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. Zero of two shellfish tissue samples did not exceed the evaluation guideline. Zero out of seven sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline and zero out of seven sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42477, Cadmium **Region 3**

Santa Barbara Harbor

LOE ID:	15586
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42477, Cadmium **Region 3**

Santa Barbara Harbor

LOE ID:	15585
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42477, Cadmium **Region 3**

Santa Barbara Harbor

LOE ID:	57986
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in fish tissue is 2.2 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42477, Cadmium **Region 3**

Santa Barbara Harbor

LOE ID:	57982
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004

	Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50761**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines applied to protect for both the freshwater habitat and commercial beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50761, Chlordane **Region 3**

Santa Barbara Harbor

LOE ID:	57987
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50761, Chlordane **Region 3**

Santa Barbara Harbor

LOE ID:	57988
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50761, Chlordane — Region 3

Santa Barbara Harbor

LOE ID:	57994
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50761, Chlordane — Region 3

Santa Barbara Harbor

LOE ID:	57993
Pollutant:	Chlordane

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**48228**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not

exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48228, Chlorpyrifos **Region 3**

Santa Barbara Harbor

LOE ID:	57998
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R.

	Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48228, Chlorpyrifos **Region 3**

Santa Barbara Harbor

LOE ID:	57995
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

	Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50793	Region 3
Santa Barbara Harbor		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline applied to protect the freshwater habitat and commercial beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50793, DDT (Dichlorodiphenyltrichloroethane)	Region 3
Santa Barbara Harbor	

LOE ID:	57971
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50793, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Barbara Harbor

LOE ID:	57984
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50793, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Barbara Harbor

LOE ID:	57970
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed

	as a decimal. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50793, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Barbara Harbor

LOE ID:	57983
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47238**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47238, Diazinon **Region 3**

Santa Barbara Harbor

LOE ID:	58000
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in shellfish tissue is 2,300 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47238, Diazinon **Region 3**

Santa Barbara Harbor

LOE ID:	58001
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in fish tissue is 1,500 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50765** **Region 3**

Santa Barbara Harbor

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines applied to protect for the commercial and freshwater habitat beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50765, Endosulfan **Region 3**

Santa Barbara Harbor

LOE ID:	58009
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan. One composite (9 fish per composite) was generated from one species: speckled sanddab. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized

	into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50765, Endosulfan **Region 3**

Santa Barbara Harbor

LOE ID:	58008
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.

	There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50765, Endosulfan **Region 3**

Santa Barbara Harbor

LOE ID:	58007
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan. One composite (9 fish per composite) was generated from one species: speckled sanddab. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [

	Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50765, Endosulfan **Region 3**

Santa Barbara Harbor

LOE ID:	58006
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	

QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42490** **Region 3**

Santa Barbara Harbor

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Four of these lines of evidence summarize tissue. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single sample did not exceed the evaluation guideline applied to protect for the freshwater habitat and the commercial beneficial uses. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guideline and zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42490, Endrin **Region 3**

Santa Barbara Harbor

LOE ID:	58012
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42490, Endrin **Region 3**

Santa Barbara Harbor

LOE ID:	58013
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (9 fish per composite) was generated from one species:

	speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42490, Endrin **Region 3**

Santa Barbara Harbor

LOE ID:	58011
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or

	combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42490, Endrin **Region 3**

Santa Barbara Harbor

LOE ID:	58010
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42490, Endrin **Region 3**

Santa Barbara Harbor

LOE ID:	16482
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42490, Endrin **Region 3**

Santa Barbara Harbor

LOE ID:	16481
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50770** **Region 3**

Santa Barbara Harbor

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50770, Heptachlor **Region 3**

Santa Barbara Harbor

LOE ID:	58014
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.

	There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50770, Heptachlor **Region 3**

Santa Barbara Harbor

LOE ID:	58015
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2

	locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50773** **Region 3**

Santa Barbara Harbor

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of zero shellfish tissue samples exceeded the evaluation guideline. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the freshwater habitat beneficial use. This same single fish tissue sample was not evaluated for the commercial beneficial use because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50773, Heptachlor epoxide **Region 3**

Santa Barbara Harbor

LOE ID:	58016
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50773, Heptachlor epoxide **Region 3**

Santa Barbara Harbor

LOE ID:	58018
Pollutant:	Heptachlor epoxide

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50773, Heptachlor epoxide **Region 3**

Santa Barbara Harbor

LOE ID:	58019
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the

	criterion for Heptachlor epoxide. One composite (9 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50773, Heptachlor epoxide **Region 3**

Santa Barbara Harbor

LOE ID:	58017
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50775**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50775, Hexachlorobenzene/ HCB **Region 3**

Santa Barbara Harbor

LOE ID:	58020
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50775, Hexachlorobenzene/ HCB **Region 3**

Santa Barbara Harbor

LOE ID:	58021
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 50781 **Region 3**

Santa Barbara Harbor

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50781, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) — Region 3

Santa Barbara Harbor

LOE ID:	58023
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and

	homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50781, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Barbara Harbor

LOE ID:	58024
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50781, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Barbara Harbor

LOE ID:	58022
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50781, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Barbara Harbor

LOE ID:	57953
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [

	Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42323 — Region 3

Santa Barbara Harbor

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guidelines and zero out of seven sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42323, Mercury — Region 3

Santa Barbara Harbor

LOE ID:	57955

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42323, Mercury **Region 3**

Santa Barbara Harbor

LOE ID:	57954
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys

Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) with a consumption rate of 21 g/day is 0.20 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42323, Mercury **Region 3**

Santa Barbara Harbor

LOE ID:	17349
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42323, Mercury **Region 3**

Santa Barbara Harbor

LOE ID:	17348
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara

	Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50783** **Region 3**

Santa Barbara Harbor

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero shellfish tissue samples exceeded the evaluation guideline. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of zero fish tissue samples exceeded the evaluation guideline. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50783, Mirex **Region 3**

Santa Barbara Harbor

LOE ID:	57957
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (9 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50783, Mirex **Region 3**

Santa Barbara Harbor

LOE ID:	57956
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50785**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the

Conclusion:	Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50785, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Santa Barbara Harbor

LOE ID:	57960
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be

	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in fish tissue is 0.7 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50785, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Santa Barbara Harbor

LOE ID:	57959
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50786	Region 3
Santa Barbara Harbor		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. One out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline applied to protect for aquatic life beneficial uses but did exceed the evaluation guideline applied to protect for the commercial beneficial use. One out of two shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50786, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Barbara Harbor

LOE ID:	57963
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50786, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Barbara Harbor

LOE ID:	57962
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50786, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Barbara Harbor

LOE ID:	57961
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: One of the two samples did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50786, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Barbara Harbor

LOE ID:	57964
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PCB, Total. One composite (9 fish per composite) was generated from one species: speckled sanddab. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50791**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples

is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50791, Selenium **Region 3**

Santa Barbara Harbor

LOE ID:	57966
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50791, Selenium **Region 3**

Santa Barbara Harbor

LOE ID:	57969
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50794	Region 3
Santa Barbara Harbor		

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero shellfish tissue samples exceeded the evaluation guideline. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single fish tissue sample did not exceed the evaluation guideline applied to protect the freshwater habitat beneficial uses. This same single fish tissue sample could not be evaluated with the evaluation guideline applied to protect the commercial beneficial use because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50794, Toxaphene	**Region 3**
Santa Barbara Harbor	

LOE ID:	57985
Pollutant:	Toxaphene

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in shellfish tissue is 6.5 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50794, Toxaphene **Region 3**

Santa Barbara Harbor

LOE ID:	57991
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Toxaphene. One composite (9 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in fish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50794, Toxaphene **Region 3**

Santa Barbara Harbor

LOE ID:	57989
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Toxaphene. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50794, Toxaphene **Region 3**

Santa Barbara Harbor

LOE ID:	57990
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxaphene. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50795**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Tributyltin TBT (Tributylstanne)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. Zero of zero fish tissue samples exceeded the evaluation guideline applied to protect the freshwater habitat beneficial uses. One sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50795, Tributyltin TBT (Tributylstanne) **Region 3**

Santa Barbara Harbor

LOE ID:	57992
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in shellfish tissue is 1 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50795, Tributyltin TBT (Tributylstanne) **Region 3**

Santa Barbara Harbor

LOE ID:	57996
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Tributyltin as Sn. One composite (9 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in fish tissue is 0.66 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42624	Region 3
Santa Barbara Harbor		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the three water samples exceed the California Toxics Rule criterion. Zero of the 7 sediment samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three water samples exceed the California Toxics Rule criterion. Zero of the 7 sediment samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42624, Zinc **Region 3**

Santa Barbara Harbor

LOE ID:	57997
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the CTR value of 81 ug/L for dissolved zinc in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in saline water. The CTR value is 81 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A total of four grab samples were collected from inside the marina basin (Sites 1, 2, 3, & 4), these were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42624, Zinc **Region 3**

Santa Barbara Harbor

LOE ID:	17865
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42624, Zinc **Region 3**

Santa Barbara Harbor

LOE ID:	17866
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **53214** **Region 3**

Santa Barbara Harbor

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objectives for Marine Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 11 samples exceed the water quality objectives for Marine Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53214, pH **Region 3**

Santa Barbara Harbor

LOE ID:	57965
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 11 minimums and maximums had no exceedences.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Santa Barbara Harbor 1.1 Santa Barbara Harbor 1.2 Santa Barbara Harbor 1.3 Santa Barbara Harbor 2.1 Santa Barbara Harbor 2.2 Santa Barbara Harbor 2.3 Santa Barbara Harbor 3.1 Santa Barbara Harbor 3.2 Santa Barbara Harbor 3.3 Santa Barbara Harbor 4.1 Santa Barbara Harbor 4.2
Temporal Representation:	Samples were collected twice in August 2006 and once in September 2006.

Environmental Conditions:

QAPP Information: Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)

QAPP Information Reference(s):

DECISION ID 42473 Region 3

Santa Barbara Harbor

Pollutant:	**Arsenic**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample exceeded the evaluation guideline. Two out of two shellfish tissue samples exceeded the evaluation guideline. Zero out of seven sediment samples exceeded the evaluation guideline. For the commercial and freshwater habitat beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of two shellfish tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42473, Arsenic Region 3

Santa Barbara Harbor

LOE ID:	15805
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42473, Arsenic **Region 3**

Santa Barbara Harbor

LOE ID:	15806
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42473, Arsenic **Region 3**

Santa Barbara Harbor

LOE ID:	57981
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Arsenic. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in fish tissue is 0.0034 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008;

	OEHHA, 2004)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42473, Arsenic **Region 3**

Santa Barbara Harbor

LOE ID:	57980
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42521**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Copper**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Five lines of evidence are available in the administrative record to assess this pollutant. All three water samples exceed the California Toxics Rule criterion. Three of the 7 sediment samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses however, there was not a significant toxic effect to the test organisms in these samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All three water samples exceed the California Toxics Rule criterion and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42521, Copper	**Region 3**
Santa Barbara Harbor	

LOE ID:	57999
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All of the three samples exceeded the CTR value of 3.1 ug/L for dissolved copper in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in marine waters.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	A total of four grab samples were collected from inside the marina basin (Sites 1, 2, 3, & 4), these were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42521, Copper **Region 3**

Santa Barbara Harbor

LOE ID:	15958
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42521, Copper **Region 3**

Santa Barbara Harbor

LOE ID:	15957
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [

	315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42521, Copper **Region 3**

Santa Barbara Harbor

LOE ID:	24353
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42521, Copper **Region 3**

Santa Barbara Harbor

LOE ID:	24346
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42481	Region 3
Santa Barbara Harbor		

Pollutant:	**Dieldrin**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Four of these summarize tissue samples. Two out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the freshwater habitat beneficial uses. This single fish tissue could not be used for the commercial beneficial use because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. Zero out of six sediment samples exceeded the evaluation guideline. For the freshwater habitat and commercial beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of two shellfish tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42481, Dieldrin	Region 3
Santa Barbara Harbor	

LOE ID:	16663
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42481, Dieldrin **Region 3**

Santa Barbara Harbor

LOE ID:	16649
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42481, Dieldrin **Region 3**

Santa Barbara Harbor

LOE ID:	58003
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency

Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42481, Dieldrin **Region 3**

Santa Barbara Harbor

LOE ID:	58002
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: The two samples exceeded the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 315SBRB19 and 315SBRB29. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	

QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42481, Dieldrin **Region 3**

Santa Barbara Harbor

LOE ID:	58004
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (9 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42481, Dieldrin **Region 3**

Santa Barbara Harbor

LOE ID:	58005

Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Dieldrin. One composite (9 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 1 monitoring site [Santa Barbara Harbor random site 11 - 315SBRB11]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52414** **Region 3**

Santa Barbara Harbor

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Twelve of the 12 samples exceeded the water quality objective for dissolved oxygen in Marine Habitats and therefore this use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 12 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52414, Oxygen, Dissolved **Region 3**

Santa Barbara Harbor

LOE ID:	57958
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Twelve of 12 samples exceeded the objective.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Santa Barbara Harbor 1.1* Santa Barbara Harbor 1.2* Santa Barbara Harbor 1.3* Santa Barbara Harbor 2.1 Santa Barbara Harbor 2.2* Santa Barbara Harbor 2.3 Santa Barbara Harbor 3.1 Santa Barbara Harbor 3.2* Santa Barbara Harbor 3.3 Santa Barbara Harbor 4.1 Santa Barbara Harbor 4.2* Santa Barbara Harbor 4.3
Temporal Representation:	Samples were collected twice in August 2006 and once in September 2006.
Environmental Conditions:	

QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID **41938** **Region 3**

Santa Barbara Harbor

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41938, Anthracene **Region 3**

Santa Barbara Harbor

LOE ID:	15718
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41938, Anthracene **Region 3**

Santa Barbara Harbor

LOE ID:	15717
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41893	Region 3
Santa Barbara Harbor		

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41893, Benzo(a)anthracene — Region 3

Santa Barbara Harbor

LOE ID:	14835
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41893, Benzo(a)anthracene — Region 3

Santa Barbara Harbor

LOE ID:	15601
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41892**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41892, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Santa Barbara Harbor

LOE ID:	15484
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41892, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Santa Barbara Harbor

LOE ID:	15485
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42478** **Region 3**

Santa Barbara Harbor

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 7 samples exceed the Evaluation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42478, Chromium **Region 3**

Santa Barbara Harbor

LOE ID:	16027
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42478, Chromium **Region 3**

Santa Barbara Harbor

LOE ID:	16040
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	41941	Region 3
Santa Barbara Harbor		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41941, Chrysene (C1-C4)	**Region 3**
Santa Barbara Harbor	

LOE ID:	15873
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41941, Chrysene (C1-C4) **Region 3**

Santa Barbara Harbor

LOE ID:	15872
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42632**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42632, Fluoranthene	**Region 3**
Santa Barbara Harbor	

LOE ID:	16567
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42632, Fluoranthene **Region 3**

Santa Barbara Harbor

LOE ID:	16566
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42530**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42530, Fluorene **Region 3**

Santa Barbara Harbor

LOE ID:	16523
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42530, Fluorene **Region 3**

Santa Barbara Harbor

LOE ID:	16445
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42487** **Region 3**

Santa Barbara Harbor

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42487, Lead **Region 3**

Santa Barbara Harbor

LOE ID:	17278
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42487, Lead **Region 3**

Santa Barbara Harbor

LOE ID:	17279
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41898	Region 3
Santa Barbara Harbor		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41898, Naphthalene	**Region 3**
Santa Barbara Harbor	

LOE ID:	17165
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Naphthalene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41898, Naphthalene **Region 3**

Santa Barbara Harbor

LOE ID:	17178
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42513** **Region 3**

Santa Barbara Harbor

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess Nickel concentrations and two lines of evidence are available in the administrative record to assess sediment toxicity. None of the 6 samples were toxic to test organisms. Therefore, Nickel cannot be associated with toxic effects in the Santa Barbara Harbor. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. However, there are an insufficient number of samples to make a "use rating" decision. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples were toxic to test organisms. Therefore, Nickel cannot be associated with toxic effects in the Santa Barbara Harbor. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42513, Nickel **Region 3**

Santa Barbara Harbor

LOE ID:	16999

Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42513, Nickel **Region 3**

Santa Barbara Harbor

LOE ID:	24346
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as

	follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42513, Nickel **Region 3**

Santa Barbara Harbor

LOE ID:	24353
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42513, Nickel **Region 3**

Santa Barbara Harbor

LOE ID:	16998
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel

	is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41899** **Region 3**

Santa Barbara Harbor

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41899, Phenanthrene **Region 3**

Santa Barbara Harbor

LOE ID:	17085
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41899, Phenanthrene **Region 3**

Santa Barbara Harbor

LOE ID:	17098
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42623**	**Region 3**
Santa Barbara Harbor		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42623, Pyrene **Region 3**

Santa Barbara Harbor

LOE ID:	16979
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42623, Pyrene **Region 3**

Santa Barbara Harbor

LOE ID:	16909
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42319** **Region 3**

Santa Barbara Harbor

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the

Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. Six sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity). Zero of the six sediment samples resulted in a significant toxic effect to one or more test organisms.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the six sediment samples exceed the water quality objectives for protection of aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42319, Toxicity **Region 3**

Santa Barbara Harbor

LOE ID:	24353
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both

	criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42319, Toxicity **Region 3**

Santa Barbara Harbor

LOE ID:	24346
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Santa Barbara Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Barbara Harbor was collected at 6 monitoring sites [315SBRB27 - Santa Barbara Harbor, 315SBRB13 - Santa Barbara Harbor, 315SBRB03 - Santa Barbara Harbor, 315SBRB19 - Santa Barbara Harbor, 315SBRB29 - Santa Barbara Harbor, 315SBRB11 - Santa Barbara Harbor]
Temporal Representation:	Data was collected on a single day 6/21/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Ysidro Creek**
Water Body ID: **CAR3153301020080612170415**
Water Body Type: **River & Stream**

DECISION ID **39434** **Region 3**
San Ysidro Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 8 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 9 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 8 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 9 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39434, Ammonia **Region 3**

San Ysidro Creek

LOE ID:	10457
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39434, Ammonia **Region 3**

San Ysidro Creek

LOE ID:	10471
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39434, Ammonia **Region 3**

San Ysidro Creek

LOE ID:	51858
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39434, Ammonia **Region 3**

San Ysidro Creek

LOE ID:	51888
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 2/26/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38213** **Region 3**

San Ysidro Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 7 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 7 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38213, Chlorophyll-a — Region 3

San Ysidro Creek

LOE ID:	51889
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38213, Chlorophyll-a **Region 3**

San Ysidro Creek

LOE ID:	10472
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48825**	**Region 3**
San Ysidro Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 3 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48825, Escherichia coli (E. coli) **Region 3**

San Ysidro Creek

LOE ID:	51873
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37810** **Region 3**

San Ysidro Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Three of 9 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 1 of 9 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 9 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 9 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37810, Fecal Coliform **Region 3**

San Ysidro Creek

LOE ID:	51872
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37810, Fecal Coliform **Region 3**

San Ysidro Creek

LOE ID:	51875
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37810, Fecal Coliform — Region 3

San Ysidro Creek

LOE ID:	12275
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37810, Fecal Coliform — Region 3

San Ysidro Creek

LOE ID:	12274
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6

Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38437**	**Region 3**
San Ysidro Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 9 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. One of the 3 nitrate samples exceed the water quality objectives for Warm Freshwater Habitat. Zero of the 3 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. One of the 3 nitrate/nitrite samples exceed the water quality objectives for Warm Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does not satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 9 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. One of the 3 nitrate samples exceed the water quality objectives for Warm Freshwater Habitat. Zero of the 3 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. One of the 3 nitrate/nitrite samples exceed the water quality objectives for Warm Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38437, Nitrate **Region 3**

San Ysidro Creek

LOE ID:	10473
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38437, Nitrate **Region 3**

San Ysidro Creek

LOE ID:	51860
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38437, Nitrate **Region 3**

San Ysidro Creek

LOE ID:	51861
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38437, Nitrate **Region 3**

San Ysidro Creek

LOE ID:	51890
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38437, Nitrate **Region 3**

San Ysidro Creek

LOE ID:	51891
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38200** **Region 3**

San Ysidro Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 9 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38200, Oxygen, Dissolved **Region 3**

San Ysidro Creek

LOE ID:	51901
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38200, Oxygen, Dissolved **Region 3**

San Ysidro Creek

LOE ID:	51902
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38200, Oxygen, Dissolved **Region 3**

San Ysidro Creek

LOE ID:	14233
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38200, Oxygen, Dissolved **Region 3**

San Ysidro Creek

LOE ID:	14232
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38212** **Region 3**

San Ysidro Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 9 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 22 of the 92 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38212, Turbidity **Region 3**

San Ysidro Creek

LOE ID:	13908
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon.

	Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38212, Turbidity **Region 3**

San Ysidro Creek

LOE ID:	51904
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38179** **Region 3**

San Ysidro Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. One of the 9 samples exceed the water quality objective for Warm Freshwater Habitat, and 4 of the 9 samples exceed the water quality objectives for Drinking Water and Recreation. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 9 samples exceed the water quality objective for Warm Freshwater Habitat, and 4 of the 9 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38179, pH **Region 3**

San Ysidro Creek

LOE ID:	51903
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38179, pH **Region 3**

San Ysidro Creek

LOE ID:	51862
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38179, pH **Region 3**

San Ysidro Creek

LOE ID:	51874
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38179, pH **Region 3**

San Ysidro Creek

LOE ID:	51876
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Ysidro Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38179, pH **Region 3**

San Ysidro Creek

LOE ID:	12291
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38179, pH **Region 3**

San Ysidro Creek

LOE ID:	12292
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38179, pH **Region 3**

San Ysidro Creek

LOE ID:	12276
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38179, pH **Region 3**

San Ysidro Creek

LOE ID:	12277
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Ysidro Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42507	Region 3
San Ysidro Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. This decision will not use the single water sample collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample will not be used because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and the result was non-detect. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42507, Chlorpyrifos **Region 3**

San Ysidro Creek

LOE ID:	16215
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42508** **Region 3**

San Ysidro Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42508, Diazinon **Region 3**

San Ysidro Creek

LOE ID:	16623
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37811**	**Region 3**
San Ysidro Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize water samples. One water sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). The single sample did not result in a significant toxic effect to one or more test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37811, Toxicity **Region 3**

San Ysidro Creek

LOE ID:	24345
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37811, Toxicity **Region 3**

San Ysidro Creek

LOE ID:	24337
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Ysidro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Ysidro Creek was collected at 1 monitoring site [315YSI-San Ysidro Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Pedro Creek (Santa Barbara County)**
Water Body ID: **CAR3153102020080612165413**
Water Body Type: **River & Stream**

DECISION ID **37762** **Region 3**
San Pedro Creek (Santa Barbara County)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Eighteen of 34 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 29 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of 34 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37762, Escherichia coli (E. coli) **Region 3**
San Pedro Creek (Santa Barbara County)

LOE ID: 51999

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37762, Escherichia coli (E. coli) **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14945
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	29
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 29 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period

	exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37762, Escherichia coli (E. coli) Region 3

San Pedro Creek (Santa Barbara County)

LOE ID:	14944
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	29
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 15 of 29 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID 37763 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'.

Four lines of evidence are available in the administrative record to assess this pollutant. Eight of 16 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 4 of 16 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 16 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37763, Fecal Coliform **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	12386
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37763, Fecal Coliform **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	12387
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]

Temporal Representation: Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37763, Fecal Coliform **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID: 51998

Pollutant: Fecal Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 5

Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Coliform, Fecal.

Data Reference: Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.

Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]

Temporal Representation: Data was collected over the time period 1/29/2008-12/17/2008.

Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37763, Fecal Coliform **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52001
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37720 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 16 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 16 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37720, Sodium **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51939
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37720, Sodium **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	10687
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 9 of 11 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37801 **Region 3**

San Pedro Creek (Santa Barbara County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Ten of the 49 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 49 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37801, Temperature, water **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14124
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan,

	Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37801, Temperature, water **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14148
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37801, Temperature, water **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15029
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 6 of 30 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37801, Temperature, water **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51978
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38510 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Six of the 49 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 9 of the 49 samples exceed the water quality objective for Agricultural Supply, and 17 of the 49 samples exceeded the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the 49 samples exceed the water quality objective for Agricultural Supply, and 17 of the 49 samples exceeded the water quality objectives for Drinking Water and Recreation. All of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51997
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51960
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51924
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all

	Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52038
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52017
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52000
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	12426
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	12407
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14888
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30

Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 9 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14890
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 4 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14872
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 9 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14871
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 4 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14870
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14889
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	30
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 9 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.

QAPP Information Reference(s): e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID: 12406

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 11
Number of Exceedances: 7

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation: Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID: 12425

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	12445
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not

	be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	12423
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38510, pH — Region 3

San Pedro Creek (Santa Barbara County)

LOE ID:	12422
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38510, pH — Region 3

San Pedro Creek (Santa Barbara County)

LOE ID:	12405
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	12404
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38510, pH **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	12442
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38510, pH — Region 3

San Pedro Creek (Santa Barbara County)

LOE ID:	12443
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38510, pH — Region 3

San Pedro Creek (Santa Barbara County)

LOE ID:	12444
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39938 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 17 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 17 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 17 samples exceed the water quality objective for unionized ammonia and zero of the 17 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do

not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39938, Ammonia **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52018
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39938, Ammonia **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51979
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39938, Ammonia **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51940
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section

	II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39938, Ammonia **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	10639
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39938, Ammonia **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	10654
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39938, Ammonia **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	10653
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37795 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37795, Boron **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	10655
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37795, Boron **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51768
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37667** **Region 3**

San Pedro Creek (Santa Barbara County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 16 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 16 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37667, Chloride **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51769
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37667, Chloride **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	10656
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	39926	Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39926, Chlorophyll-a **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	10670
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39926, Chlorophyll-a **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	10671
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39926, Chlorophyll-a **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52019
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39926, Chlorophyll-a **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51941
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37764 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 48 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. One of the 6 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 5 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. One of the 5 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 48 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. There were insufficient samples to determine if Cold and Warm Water Habitat is supported. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37764, Nitrate Region 3

San Pedro Creek (Santa Barbara County)

LOE ID:	10673
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15059
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	31
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	10672
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15058
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel

	Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51942
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51957
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51982
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51981
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51921
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52035
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37764, Nitrate **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52020
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the

	criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53481 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the six samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53481, Nitrogen, Nitrite **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51923
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38694** **Region 3**

San Pedro Creek (Santa Barbara County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Three of the 49 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 49 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 49 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 49 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51958
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51959
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52037
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52036
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14125
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14126
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14127
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14144
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14105
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14089
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14088
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15163
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15164
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.

QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15198
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 7 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15197
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30

Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 7 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38694, Oxygen, Dissolved **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14106
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37681 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three of the 48 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 48 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37681, Specific Conductivity Region 3

San Pedro Creek (Santa Barbara County)

LOE ID:	12403
Pollutant:	Electrical Conductivity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37681, Specific Conductivity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	12424
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37681, Specific Conductivity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15068
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	29
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 3 of 29 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37681, Specific Conductivity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51770
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37837 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize water samples. One water sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and one water sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in water samples. One of the two water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. When the sample count is summed, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the two water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37837, Toxicity — Region 3

San Pedro Creek (Santa Barbara County)

LOE ID:	80341
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The one sample exhibited significant toxicity Selenastrum capricornutum total cell count. The toxicity tests included survival and reproduction of Ceriodaphnia dubia and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315SPCxxx.
Temporal Representation:	The samples were collected in January 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37837, Toxicity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	57952
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The one sample exhibited significant toxicity Selenastrum capricornutum total cell count. The toxicity tests included survival and reproduction of Ceriodaphnia dubia and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315SPCxxx.
Temporal Representation:	The samples were collected in January 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37837, Toxicity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	24288
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected on a single day 12/5/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37837, Toxicity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	24292
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected on a single day 12/5/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37837, Toxicity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	24299
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected on a single day 12/5/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37837, Toxicity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	24289
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected on a single day 12/5/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37802 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Six of the 48 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 6 of the 48 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 48 samples exceed the evaluation guideline for Cold Freshwater Habitat and 6 of the 48 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37802, Turbidity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14108
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37802, Turbidity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14989
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 29 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37802, Turbidity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14988

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 29 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37802, Turbidity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14147
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37802, Turbidity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14146
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [

	315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/2/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37802, Turbidity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	14123
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Pedro Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-2/12/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37802, Turbidity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	52039

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37802, Turbidity **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	51961
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42495 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42495, Chlorpyrifos **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	16199
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected on a single day 12/5/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42495, Chlorpyrifos **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	16186
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected on a single day 12/5/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42496 Region 3

San Pedro Creek (Santa Barbara County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42496, Diazinon **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	16700
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected on a single day 12/5/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42496, Diazinon **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	16869
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Pedro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [315SPC-San Pedro Creek d/s of Holister Road]
Temporal Representation:	Data was collected on a single day 12/5/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37682** **Region 3**

San Pedro Creek (Santa Barbara County)

Pollutant: **Enterococcus**

Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixteen of 30 samples exceeded the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37682, Enterococcus **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15105
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 16 of 30 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37682, Enterococcus **Region 3**

San Pedro Creek (Santa Barbara County)

LOE ID:	15106
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Pedro Creek to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Pedro Creek was collected at 1 monitoring site [SP1 - San Pedro Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Martin Creek**
Water Body ID: **CAR3053002020080620141614**
Water Body Type: **River & Stream**

DECISION ID **38057** **Region 3**
San Martin Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant total ammonia. This decision contains all of the LOEs from the previous decision.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38057, Ammonia **Region 3**
San Martin Creek

LOE ID: 17437

Pollutant: Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Martin Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Martin Creek was collected at 1 monitoring site [Foothill Ave]
Temporal Representation:	Data was collected on a single day 2/25/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37899**	**Region 3**
San Martin Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Municipal and Domestic Supply water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a

	beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37899, Nitrate **Region 3**

San Martin Creek

LOE ID:	17455
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Martin Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Martin Creek was collected at 1 monitoring site [Foothill Ave]
Temporal Representation:	Data was collected on a single day 2/25/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **37898** **Region 3**

San Martin Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37898, pH **Region 3**

San Martin Creek

LOE ID:	17474
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Martin Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Martin Creek was collected at 1 monitoring site [Foothill Ave]
Temporal Representation:	Data was collected on a single day 2/25/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37898, pH **Region 3**

San Martin Creek

LOE ID:	17491
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Martin Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Martin Creek was collected at 1 monitoring site [Foothill Ave]
Temporal Representation:	Data was collected on a single day 2/25/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37898, pH **Region 3**

San Martin Creek

LOE ID:	17476
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Martin Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Martin Creek was collected at 1 monitoring site [Foothill Ave]
Temporal Representation:	Data was collected on a single day 2/25/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37898, pH **Region 3**

San Martin Creek

LOE ID:	17490
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Martin Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Martin Creek was collected at 1 monitoring site [Foothill Ave]
Temporal Representation:	Data was collected on a single day 2/25/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37898, pH **Region 3**

San Martin Creek

LOE ID:	17475
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Martin Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Martin Creek was collected at 1 monitoring site [Foothill Ave]
Temporal Representation:	Data was collected on a single day 2/25/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Jose Creek (Santa Barbara County)**
Water Body ID: **CAR3153101020080613155318**
Water Body Type: **River & Stream**

DECISION ID **38305** **Region 3**
San Jose Creek (Santa Barbara County)

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 28 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-four of the 28 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38305, Chloride **Region 3**
San Jose Creek (Santa Barbara County)

LOE ID: 10647

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	16
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 13 of 16 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38305, Chloride **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51514
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40016**	**Region 3**
San Jose Creek (Santa Barbara County)		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Three lines of evidence are available in the administrative record to assess this pollutant. Twenty six of 81 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 69 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-six of 81 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40016, Escherichia coli (E. coli) Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	51536
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40016, Escherichia coli (E. coli) Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	14946
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	69
Number of Exceedances:	23
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to

	determine beneficial use support and results are as follows: 23 of 69 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40016, Escherichia coli (E. coli) Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	14947
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	69
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 69 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]

Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID 39919 Region 3

San Jose Creek (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fourteen of 27 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 1 of 27 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39919, Fecal Coliform Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	12252
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15

Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39919, Fecal Coliform **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12253
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39919, Fecal Coliform **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51535
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39919, Fecal Coliform **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51538
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39982 **Region 3**

San Jose Creek (Santa Barbara County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown

Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of the 28 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-five of the 28 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39982, Sodium **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51520
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39982, Sodium **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	10603
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 14 of 16 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	39990	Region 3
San Jose Creek (Santa Barbara County)		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

[NUMBER] lines of evidence are available in the administrative record to assess this pollutant. [NUMBER] of the [NUMBER] samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. [NUMBER] of [NUMBER] samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39990, Specific Conductivity	Region 3
San Jose Creek (Santa Barbara County)	

LOE ID:	15069
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	68
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to

	determine beneficial use support and results are as follows: 6 of 68 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39990, Specific Conductivity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12269
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 10 of 16 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]

Temporal Representation: Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39990, Specific Conductivity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID: 12290

Pollutant: Electrical Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Conductivity(Us).

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]

Temporal Representation: Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39990, Specific Conductivity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51515
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 10 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39818** **Region 3**

San Jose Creek (Santa Barbara County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Five of the 102 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, 11 of the 102 samples exceed the water quality objective for Agricultural Supply, and 17 of the 102 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of the 102 samples exceed the water quality objectives for Drinking Water, and Recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51527
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51537
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51539
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51534
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51519
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51567
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12272
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12324
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH — Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	12271
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH — Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	12270
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12289
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12287
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12288
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12308
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12307
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12306
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12304
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	12305
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling

	(DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14910
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	70
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 10 of 70 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2

	monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14909
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	70
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 10 of 70 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14908
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	70
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 10 of 70 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14911
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	70
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 70 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14891
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	70
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 70 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel

	Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39818, pH **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14892
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	70
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 70 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID 38132 **Region 3**

San Jose Creek (Santa Barbara County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision

Conclusion:	replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 28 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 28 samples exceed the water quality objective for unionized ammonia and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38132, Ammonia **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51521
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38132, Ammonia **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51551
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38132, Ammonia **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51530

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38132, Ammonia **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	10631
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38132, Ammonia **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	10645
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1

	monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38132, Ammonia **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	10630
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38248 **Region 3**

San Jose Creek (Santa Barbara County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 28 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38248, Boron **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	10646
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the

	maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38248, Boron **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51513
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

DECISION ID	40010	Region 3
San Jose Creek (Santa Barbara County)		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40010, Chlorophyll-a	**Region 3**
San Jose Creek (Santa Barbara County)	

LOE ID:	51522
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40010, Chlorophyll-a **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51552
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40010, Chlorophyll-a **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	10587
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40010, Chlorophyll-a **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	10586
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39800 Region 3

San Jose Creek (Santa Barbara County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 98 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. These uses are fully supported. The most recent 13 samples (collected in between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Eight of the 13 samples exceed the evaluation guideline but there is no supporting evidence indicating high risk for, or occurrence of, eutrophication. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 98 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Although eight of the 13 samples exceed the evaluation guideline for aquatic life protection there is no supporting evidence indicating occurrence of eutrophication. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39800, Nitrate — Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	10589
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39800, Nitrate — Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	10588
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39800, Nitrate **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	15061
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	69
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 69 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39800, Nitrate **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	15060
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	69
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 69 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39800, Nitrate **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51533
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39800, Nitrate **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51532
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39800, Nitrate **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51523
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39800, Nitrate **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51516
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39800, Nitrate **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51554
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39800, Nitrate **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51553
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39800, Nitrate **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51524
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53469 Region 3

San Jose Creek (Santa Barbara County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53469, Nitrogen, Nitrite **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51518
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	39931	Region 3
San Jose Creek (Santa Barbara County)		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Six of the 101 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 101 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 101 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 101 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved	**Region 3**
San Jose Creek (Santa Barbara County)	

LOE ID:	51525
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51566
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51565
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51526
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14005
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	15180
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	70
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 70 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	15179
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	70
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 70 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	13964
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14004
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14003
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	15201
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	70
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 70 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	15200
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	70
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 70 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14006
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	13967
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	13966
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39931, Oxygen, Dissolved **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	13965
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39979 Region 3

San Jose Creek (Santa Barbara County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Eight LOEs summarize water samples. Three water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in water samples. One of the five water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of the five samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39979, Toxicity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	24421
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39979, Toxicity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	24431
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39979, Toxicity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	24000

Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39979, Toxicity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	24419
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39979, Toxicity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	24409
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39979, Toxicity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	23999
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39979, Toxicity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	81176
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Two of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count and Hyalella Azteca survival. The toxicity tests included total cell count of Selenastrum capricornutum and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The samples were collected at station 315SJCxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	The observed toxicity for two of the test results were due to the samples salinity and weren't included in the count of exceedances.
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39979, Toxicity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	57809
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Two of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count and Hyalella Azteca survival. The toxicity tests included total cell count of Selenastrum capricornutum and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315SJCxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	The observed toxicity for two of the test results were due to the samples salinity and weren't included in the count of exceedances.
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID 39998 **Region 3**

San Jose Creek (Santa Barbara County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Nine of the 102 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 9 of the 102 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 102 samples exceed the evaluation guideline for both Cold and Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39998, Turbidity — Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	51528
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39998, Turbidity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51568
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39998, Turbidity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14023
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39998, Turbidity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	13984
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39998, Turbidity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14024
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39998, Turbidity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14991
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	69
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 69 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39998, Turbidity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14990
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	69
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 69 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39998, Turbidity **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	13985
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39806 Region 3

San Jose Creek (Santa Barbara County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 103 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. The evaluation guideline is relevant for this water segment because there are historic and recent documentation of steelhead trout in this segment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-two of the 103 samples exceed the evaluation guideline and this exceeds the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39806, Temperature, water **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	14025
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39806, Temperature, water **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	15028

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	71
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 71 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39806, Temperature, water **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	13986
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 10 of 16 samples exceed the criterion for Water Temperature.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39806, Temperature, water **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	51529
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1

	monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 1/29/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41578 Region 3

San Jose Creek (Santa Barbara County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One sample exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to aquatic life beneficial uses. This decision will not use the other sample collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the result could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One sample exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41578, Chlorpyrifos Region 3

San Jose Creek (Santa Barbara County)

LOE ID:	16183
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41578, Chlorpyrifos **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	16171
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41579 Region 3

San Jose Creek (Santa Barbara County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson 2004) applied to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson 2004) applied to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41579, Diazinon **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	16868
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41579, Diazinon **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	16685
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 1 monitoring site [315SJC-San Jose Creek at Kellogg Boulevard]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39963 **Region 3**

San Jose Creek (Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. No new data were assessed. Two lines of evidence are available in the administrative record to assess this pollutant. Forty two of 66 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 66 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty two of 66 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39963, Enterococcus **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	15107
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	42
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 42 of 66 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2].
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39963, Enterococcus **Region 3**

San Jose Creek (Santa Barbara County)

LOE ID:	15122
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	66
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for San Jose Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 66 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Santa Barbara County) was collected at 2 monitoring sites [SJ1, SJ2]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Salsipuedes Creek (Santa Barbara County)**
Water Body ID: **CAR3142002320080612154159**
Water Body Type: **River & Stream**

DECISION ID **39491** **Region 3**
Salsipuedes Creek (Santa Barbara County)

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Eighteen of the 27 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of the 27 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39491, Chloride **Region 3**
Salsipuedes Creek (Santa Barbara County)

LOE ID: 9774

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 8 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39491, Chloride **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51291
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39259 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-three of the 27 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-three of the 27 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39259, Sodium Region 3

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51307
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39259, Sodium **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	9802
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 13 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39616 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 27 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 27 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 27 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39616, Ammonia **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51309
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39616, Ammonia **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51281
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39616, Ammonia **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51250
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39616, Ammonia **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	9771
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]

Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39616, Ammonia **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	9772
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39616, Ammonia **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	9758

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39918 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Zero of the 27 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39918, Boron **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	9773
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39918, Boron **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51290
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39323** **Region 3**

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39323, Chlorophyll-a **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51251
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39323, Chlorophyll-a **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51310
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39323, Chlorophyll-a **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	9786
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39323, Chlorophyll-a — Region 3

Salsipuedes Creek (Santa Barbara County)

LOE ID:	9787
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39323, Chlorophyll-a — Region 3

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13172
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39323, Chlorophyll-a **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13173
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48822 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E.coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. One of 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48822, Escherichia coli (E. coli) **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51295
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39203 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial uses. One of the 12 nitrate samples exceeds the water quality objectives for Cold and Warm Freshwater Habitat beneficial uses. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. One of the 12 nitrate/nitrite samples exceeds the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does not the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial uses. One of the 12 nitrate samples exceeds the water quality objectives for Cold and Warm Freshwater Habitat beneficial uses. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. One of the 12 nitrate/nitrite samples exceeds the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39203, Nitrate Region 3

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51253
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39203, Nitrate **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51311
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek

	(314) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39203, Nitrate **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51283
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39203, Nitrate **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51252
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39203, Nitrate **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51619
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39203, Nitrate **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51293

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39203, Nitrate **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51284
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39203, Nitrate **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	9788
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]

Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39203, Nitrate **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	9789
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50690 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50690, Nitrogen, Nitrite — Region 3

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51305
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40001 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two of the 29 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats but zero of the 29 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 29 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats but zero of the 29 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51266
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51265
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51620
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51621
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13117
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13151
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13152
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13101
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13136
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13115
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13116
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40001, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13153
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39201 **Region 3**

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 29 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39201, Specific Conductivity **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11303
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39201, Specific Conductivity **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11540
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39201, Specific Conductivity **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51292
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39260 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Four of the 29 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for

water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39260, Temperature, water **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51269
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39260, Temperature, water — Region 3

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13171
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39260, Temperature, water — Region 3

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13135
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39668 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 29 samples exceed the water quality objective for Agriculture, Cold and Warm Freshwater Habitats and two of the 29 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 29 samples exceed the water quality objective for Agriculture, Cold and Warm Freshwater Habitats and two of the 29 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11561
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11573
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11572
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11541
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]

Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11560
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11559

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11558
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11557
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11556
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11555
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11304
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11305
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51622
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51306
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51298
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site

	[314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51296
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51267
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39668, pH **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51285
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site

	[314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39202 Region 3

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Nine of 27 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 0 of 27 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 26 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39202, Fecal Coliform Region 3

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11539
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39202, Fecal Coliform **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	11538
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39202, Fecal Coliform **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51297
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39202, Fecal Coliform **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51294
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39270 **Region 3**

Salsipuedes Creek (Santa Barbara County)

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Five of the 29 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 29 samples exceed the evaluation guidelines and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39270, Turbidity **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51623
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).

Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39270, Turbidity **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	51268
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39270, Turbidity **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13170
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39270, Turbidity **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13155
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salsipuedes Creek (314) to determine beneficial use support and results are

	as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39270, Turbidity **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13134
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39270, Turbidity **Region 3**

Salsipuedes Creek (Santa Barbara County)

LOE ID:	13133
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Salsipuedes Creek (314) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (314) was collected at 1 monitoring site [314SAL-Salsipuedes Creek at Santa Rosa Road]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Salsipuedes Creek (Santa Cruz County)**
Water Body ID: **CAR3051003020080603123522**
Water Body Type: **River & Stream**

DECISION ID **39294** **Region 3**
Salsipuedes Creek (Santa Cruz County)

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. One hundred and fifteen of the 331 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitat. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred and fifteen of the 331 samples exceeded the water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39294, Oxygen, Dissolved **Region 3**
Salsipuedes Creek (Santa Cruz County)

LOE ID: 13668

Pollutant: Dissolved oxygen saturation
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39294, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13667
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39294, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17781
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	250
Number of Exceedances:	91
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 91 of 250 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 3 monitoring

	sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156]
Temporal Representation:	Data was collected over the time period 1/4/2001-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39294, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48920
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 11 of 19 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39294, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	12122
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	31
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 4 of 31 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39294, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48643
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 6 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39294, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	12123
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 6 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39294, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57671
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Six of 14 samples exceeded the objective.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Cold Freshwater Habitat" must be greater than 7.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Salsipuedes Creek at E Lake Ave Bridge.
Temporal Representation:	Samples were collected approximately once a month from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39294, Oxygen, Dissolved **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57670
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salsipuedes Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (Santa Cruz County) was collected at 1 monitoring site [Salsipuedes Creek (305) - 305COR]
Temporal Representation:	Data was collected over the time period 2/13/2007-12/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39987 **Region 3**

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-seven of the 89 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-seven of the 89 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39987, Turbidity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13704
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39987, Turbidity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17467
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 22 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 3 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156]
Temporal Representation:	Data was collected over the time period 9/21/2005-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39987, Turbidity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	12124
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 7 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39987, Turbidity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48940
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 7 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39490 **Region 3**

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Forty of the 313 samples exceed the water quality objectives for Agriculture and 25 of the 313 samples exceed the water quality objective for Cold Freshwater Habitats. These uses are supported. However, 62 of the 313 samples exceed the water quality objectives for Drinking Water and Recreation. These uses are not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-two of the 313 samples exceed the water quality objectives for Drinking Water and Recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17947
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	262
Number of Exceedances:	53
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 53 of 262 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 3 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156]
Temporal Representation:	Data was collected over the time period 1/4/2001-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10159
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10175

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 5 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10176
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	28
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 5 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10160
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 2 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10161
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 5 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17946
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	262
Number of Exceedances:	53
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 53 of 262 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 3 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156]
Temporal Representation:	Data was collected over the time period 1/4/2001-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17945
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	262
Number of Exceedances:	53
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 53 of 262 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 3 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156]
Temporal Representation:	Data was collected over the time period 1/4/2001-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17944
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	262
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 21 of 262 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 3 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156]
Temporal Representation:	Data was collected over the time period 1/4/2001-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17943
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	262
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 33 of 262 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 3 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156]
Temporal Representation:	Data was collected over the time period 1/4/2001-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13669
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13687
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13686
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13685
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13688
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48925
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 3 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48924
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 3 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48923
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 3 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48922
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39490, pH **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48921
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 3 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39967 **Region 3**

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown

TMDL Name:	Corralitos Creek Pathogens
TMDL Project Code:	600
Date TMDL Approved by USEPA:	01/17/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Twelve of 29 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 15 samples exceed the water quality objective for non-contact recreation Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of 29 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Corralitos Creek Watershed pathogens TMDL has been approved by USEPA. 5.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39967, Escherichia coli (E. coli) **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57655
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 14 samples exceeded the E. coli Objective of 235 MPN/100mL.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected at Salsipuedes Creek @ East Lake Ave. Bridge. CAR3051003020080603123522
Temporal Representation:	Samples were collected from May 2009 through July 2010.
Environmental Conditions:	
QAPP Information:	No QAPP provided. City of Watsonville.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39967, Escherichia coli (E. coli) Region 3

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10177
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39967, Escherichia coli (E. coli) Region 3

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10178
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39820 Region 3

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Seven lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which one of the 53 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 343 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 53 samples exceed the water quality objective for unionized ammonia and zero of the 343 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39820, Ammonia **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57648
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 13 samples exceed the water quality objective for Un-ionized Ammonia (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The Un-ionized ammonia (as N) values were then established and compared to the Un-ionized Ammonia (as N) at 0.025 mg/L in the RB3 Basin Plan.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Region (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters for toxicity.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Salsipudes Creek @ East Lake Ave. Bridge.
Temporal Representation:	Samples were collected monthly from May 2009 to June 2010.

Environmental Conditions:	No data were collected on November 17, 2009 because the sampling point was dry.
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39820, Ammonia **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48635
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39820, Ammonia **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13650
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-5/19/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39820, Ammonia **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	9304
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek].
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39820, Ammonia **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48636
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39820, Ammonia **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	9303
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39820, Ammonia **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17777
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	306
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 306 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 7 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-LKU S-LVR SA-COL SA-156 SA-FEL]
Temporal Representation:	Data was collected over the time period 1/11/2001-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39833 Region 3

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 48 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 48 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39833, Chlorophyll-a **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48637
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 2 of 19 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39833, Chlorophyll-a **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13666
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39833, Chlorophyll-a **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	9307

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/19/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50814 Region 3

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the water quality objective for agricultural uses.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 14 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50814, Nitrogen, Nitrite **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57664
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 14 samples collected at the sample site exceeded the criteria for nitrite.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected at station Salsipudes Creek @ East Lake Ave. Bridge.
Temporal Representation:	Samples were collected monthly from May 2009 to July 2010.
Environmental Conditions:	No data were collected on November 17, 2009 because the sampling point was dry.
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

DECISION ID 39966 Region 3

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. One of the 236 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. [NUMBER] of [NUMBER] samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39966, Specific Conductivity Region 3

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17508
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	190
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 190 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [SA-129 - Salsipuedes Creek at Highway 129 bridge]
Temporal Representation:	Data was collected over the time period 1/4/2001-11/2/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39966, Specific Conductivity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10158
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39966, Specific Conductivity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48638
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39928 Region 3

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Twenty-seven of the 340 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-seven of the 340 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39928, Temperature, water Region 3

Salsipuedes Creek (Santa Cruz County)

LOE ID:	12125
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 2 of 28 samples exceed the criterion for Water Temperature.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39928, Temperature, water **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17636
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	260
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 25 of 260 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 3 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156]
Temporal Representation:	Data was collected over the time period 1/4/2001-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39928, Temperature, water **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	13705
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39928, Temperature, water **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48941
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39928, Temperature, water **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57582
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 14 samples exceeded the evaluation guideline
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected from Salsipuedes Creek at Salsipuedes Creek at E Lake Ave Bridge.
Temporal Representation:	Samples were collected approximately once a month from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39928, Temperature, water **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57581
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data collected by the City of Watsonville. None of the fourteen samples collected exceeded the evaluation guideline for temperature.
Data Reference:	Data for metals, temperature, nutrients and bacteria in the Pajaro River Hydrological Unit
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected in Salsipuedes Creek at E Lake Ave Bridge.
Temporal Representation:	Samples collected once a month from 5/15/2009-7/27/2010.
Environmental Conditions:	
QAPP Information:	"Although no QA/QC results are provided with this data, values reported are above detection limits or are otherwise reported as below detection limit (<). The laboratories performing the analyses used certified methods for surface water analysis. Analyses performed by the laboratories included spike, duplicate, and reference standard methods for verifying the accuracy and precision of the analyses. No field blanks or field duplicates were collected." (Jim Crowley, Source Control Manager for the City of Watsonville).

QAPP Information Reference(s):

DECISION ID	39365	Region 3
Salsipuedes Creek (Santa Cruz County)		

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. One of the 350 nitrate samples and zero of the 27 nitrate/ nitrite samples exceed the water quality objective for the Agricultural Supply beneficial use. Fourteen of the 350 nitrate samples and zero of the 27 nitrate/ nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. These uses are fully supported. Seven of the 13 nitrate/nitrite samples exceeds evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment. 1) This water body segment is on the 303(d) List due to low dissolved oxygen. Dissolved oxygen for this water body ranged from 3.59 mg/L to 16.3 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and at times exceeding the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Water column chlorophyll a concentration ranged up to 231.8 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 1.27 mg/L. This slightly exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 13 nitrate/nitrite samples exceeds evaluation guideline for the Cold and Warm Freshwater Habitat beneficial uses and this exceeds the allowable frequency listed in Table 3.1 of tthe Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	9306
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17941
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	309
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 14 of 309 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 7 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156 SA-LKU S-LVR SA-COL SA-FEL]
Temporal Representation:	Data was collected over the time period 1/11/2001-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	17940
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	309
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 309 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 7 monitoring sites [SA-129 - Salsipuedes Creek at Highway 129 bridge, d/s of Corrolitos Creek, SA-156 SA-LKU S-LVR SA-COL SA-FEL]
Temporal Representation:	Data was collected over the time period 1/11/2001-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	9305
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48642
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48641
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	48640
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR - Salsipuedes Creek (305)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57663
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 14 samples collected at the sample site exceeded the criteria for nitrate plus nitrite as N.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22. The maximum contaminant level listed in Table 64431-A for nitrate plus nitrite is 10 mg as N/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Salsipudes Creek @ East Lake Ave. Bridge.
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	No data were collected on November 17, 2009 because the sampling point was dry.
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57662
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 14 samples collected at the sample site exceeded the criteria for nitrate + nitrite as N.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 lists the maximum concentration for nitrate + nitrite as N for livestock watering as 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Salsipudes Creek @ East Lake Avenue Bridge.
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	No data were collected on November 17, 2009 because the sampling point was dry.
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57656
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 14 samples collected at the sample site exceeded the criteria for nitrate as N.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of advers effect shall be as derived from Table 3-3 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-3 shows that concentrations of nitrate as N greater than 30 mg/L will cause sever problems for sensitive crops.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Salsipudes Creek @ East Lake Avenue Bridge.
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	No data were collected on November 17, 2009 because the sampling point was dry.
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39365, Nitrate **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57668
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 14 samples collected at the sample site exceeded the criteria for nitrite as nitrogen.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22. The maximum contaminant level listed in Table 64431-A for nitrite is 1 mg as N/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Salsipudes Creek @ East Lake Ave. Bridge.
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	No data were collected on November 17, 2009 because the sampling point was dry.
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

DECISION ID 39237 **Region 3**

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in sediment samples. One of the five sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Seven LOEs summarize water samples. Five water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and nine water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fourteen total samples are available to assess toxic effects in water samples. Four of the fourteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 14 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39237, Toxicity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57584
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9

Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Three of the nine samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth, Selenastrum capricornutum growth. The three samples exhibited significant toxicity to Ceriodaphnia dubia reproduction and/or survival (10/1/08, 1/19/10, 1/25/08). The sample from 10/1/08 also reported complete mortality in less than 72 hours. . It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305COR-Salsipuedes Creek d/s of Corralitos Creek.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version) Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39237, Toxicity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	57588
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity to Hyalella azteca growth. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305COR-Salsipuedes Creek d/s of Corralitos Creek.
Temporal Representation:	The samples were collected annualy between April 2007 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version) Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39237, Toxicity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	26261
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CMP Monitoring data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR001 - Salsipuedes Creek at Highway 129]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. CMP toxicity monitoring is conducted quarterly and sediment samples (collected in spring).
Environmental Conditions:	none
QAPP Information:	State Board approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39237, Toxicity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	24380
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39237, Toxicity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	24382
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39237, Toxicity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	24560
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected on a single day 5/19/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39237, Toxicity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	24543
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR001 - Salsipuedes Creek at Highway 129]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39237, Toxicity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	24392

Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR001 - Salsipuedes Creek at Highway 129]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39237, Toxicity **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	24381
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR001 - Salsipuedes Creek at Highway 129]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39615 Region 3

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Natural Sources | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Corralitos Creek Pathogens
TMDL Project Code:	600
Date TMDL Approved by USEPA:	01/17/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to

assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Ten of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 27 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Corralitos Creek Pathogen TMDL has been approved by USEPA on 01/17/2012.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39615, Fecal Coliform **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10141
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 10 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39615, Fecal Coliform **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	10157
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 1 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39893** **Region 3**

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39893, Boron — Region 3

Salsipuedes Creek (Santa Cruz County)

LOE ID:	9308
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39821 Region 3

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39821, Chloride Region 3

Salsipuedes Creek (Santa Cruz County)

LOE ID:	9309

Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39908 Region 3

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. LOE#15633

states that zero of two sample exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, this decision will not use either of these two samples because the laboratoryÂ's method detection limit and reporting limit were greater than the evaluation guideline and the results were non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39908, Chlorpyrifos **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	15633
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR001 - Salsipuedes Creek at Highway 129]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39953 Region 3

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39953, Diazinon **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	16818
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR001 - Salsipuedes Creek at Highway 129]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39985 **Region 3**

Salsipuedes Creek (Santa Cruz County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the Agricultural Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39985, Sodium **Region 3**

Salsipuedes Creek (Santa Cruz County)

LOE ID:	9310
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Salsipuedes Creek (305) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salsipuedes Creek (305) was collected at 1 monitoring site [305COR-Salsipuedes Creek d/s of Corralitos Creek]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Salisbury Creek**
Water Body ID: **CAR3123003420080612153743**
Water Body Type: **River & Stream**

DECISION ID **39723** **Region 3**
Salisbury Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant total ammonia. This decision contains all of the LOEs from the previous decision.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample does not exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy and the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39723, Ammonia **Region 3**
Salisbury Creek

LOE ID: 9752

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Salisbury Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salisbury Creek was collected at 1 monitoring site [312SAL-Salisbury Creek at Branch Canyon Wash]
Temporal Representation:	Data was collected on a single day 2/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39734** **Region 3**

Salisbury Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy and the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39734, Chlorophyll-a **Region 3**

Salisbury Creek

LOE ID:	9753
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Salisbury Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Salisbury Creek was collected at 1 monitoring site [312SAL-Salisbury Creek at Branch Canyon Wash]
Temporal Representation:	Data was collected on a single day 2/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39734, Chlorophyll-a **Region 3**

Salisbury Creek

LOE ID:	9754
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Salisbury Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salisbury Creek was collected at 1 monitoring site [312SAL-Salisbury Creek at Branch Canyon Wash]
Temporal Representation:	Data was collected on a single day 2/29/2000. Santa Maria watershed is one of five annual

	rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39825** **Region 3**

Salisbury Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Municipal & Domestic Supply water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Municipal & Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39825, Nitrate **Region 3**

Salisbury Creek

LOE ID:	9767
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for

	Salisbury Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salisbury Creek was collected at 1 monitoring site [312SAL-Salisbury Creek at Branch Canyon Wash]
Temporal Representation:	Data was collected on a single day 2/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40018**	**Region 3**
Salisbury Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess these pollutants. Two water quality objectives are assessed: The single sample did not exceed the dissolved oxygen water quality objective for Cold or for Warm Freshwater Habitat. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient

	Information. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the dissolved oxygen water quality objective for Cold or for Warm Freshwater Habitat. This does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40018, Oxygen, Dissolved **Region 3**

Salisbury Creek

LOE ID:	13589
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Salisbury Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salisbury Creek was collected at 1 monitoring site [312SAL-Salisbury Creek at Branch Canyon Wash]
Temporal Representation:	Data was collected on a single day 2/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40018, Oxygen, Dissolved — Region 3

Salisbury Creek

LOE ID:	13357
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Salisbury Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salisbury Creek was collected at 1 monitoring site [312SAL-Salisbury Creek at Branch Canyon Wash]
Temporal Representation:	Data was collected on a single day 2/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40018, Oxygen, Dissolved — Region 3

Salisbury Creek

LOE ID:	13591
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Salisbury Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salisbury Creek was collected at 1 monitoring site [312SAL-Salisbury Creek at Branch Canyon Wash]
Temporal Representation:	Data was collected on a single day 2/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40018, Oxygen, Dissolved **Region 3**

Salisbury Creek

LOE ID:	13590
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Salisbury Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salisbury Creek was collected at 1 monitoring site [312SAL-Salisbury Creek at Branch Canyon Wash]
Temporal Representation:	Data was collected on a single day 2/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39993 Region 3
Salisbury Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39993, Temperature, water Region 3
Salisbury Creek

LOE ID:	13358
Pollutant:	Temperature, water

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Salisbury Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salisbury Creek was collected at 1 monitoring site [312SAL-Salisbury Creek at Branch Canyon Wash]
Temporal Representation:	Data was collected on a single day 2/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Romero Creek**
Water Body ID: **CAR3153301120080612170700**
Water Body Type: **River & Stream**

DECISION ID **40691** **Region 3**
Romero Creek

Pollutant: **pH**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. One of the 24 samples exceed the water quality objective for Warm Freshwater Habitats and for nine of the 24 samples exceed the water quality objectives for Drinking Water and Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the 24 samples exceed the water quality objectives for Drinking Water and Recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**
Romero Creek

LOE ID: 12421

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	12420
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	12440
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 7/17/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	12439
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 7/17/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	12438
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 7/17/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	12437
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 7/17/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	12246
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	12247

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	51441
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	51423
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	51461
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40691, pH **Region 3**

Romero Creek

LOE ID:	51426
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40638**	**Region 3**
Romero Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data zero of the 23 samples exceed the water quality objectives for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 103 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 23 samples exceed the water quality objectives for unionized ammonia set to protect aquatic life and zero of the 103 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40638, Ammonia — Region 3

Romero Creek

LOE ID:	10486
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40638, Ammonia — Region 3

Romero Creek

LOE ID:	10485
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40638, Ammonia **Region 3**

Romero Creek

LOE ID:	51442
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40638, Ammonia **Region 3**

Romero Creek

LOE ID:	51405
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40603	Region 3
Romero Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40603, Chlorophyll-a	**Region 3**
Romero Creek	

LOE ID:	51443
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the

	criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40603, Chlorophyll-a **Region 3**

Romero Creek

LOE ID:	10487
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48812**	**Region 3**
Romero Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E.coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Two of 8 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of 8 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48812, Escherichia coli (E. coli) **Region 3**

Romero Creek

LOE ID:	51425
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40555** **Region 3**

Romero Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Three of 22 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 0 of 22 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 22 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of the 22 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40555, Fecal Coliform **Region 3**

Romero Creek

LOE ID:	51424
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40555, Fecal Coliform **Region 3**

Romero Creek

LOE ID:	51440
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40555, Fecal Coliform **Region 3**

Romero Creek

LOE ID:	12418
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40555, Fecal Coliform **Region 3**

Romero Creek

LOE ID:	12419
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40678**	**Region 3**
Romero Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 23 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Eight of the 8 nitrate samples exceed the water quality objectives for Warm Freshwater Habitat. Zero of the 8 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Eight of the 8 nitrate/nitrite samples exceed the water quality objectives for Warm Freshwater Habitat. Although this exceeds the allowable frequency listed in table 3.1 of the Listing Policy, the Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing for Warm Freshwater Habitat. The following is a summary of the supporting evidence but

there is not enough evidence of eutrophic condition or risk of eutrophic condition to determine a final use rating.

1) Dissolved oxygen for this water body ranged from 8.54 mg/L to 13.24 mg/L, once exceeding the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentration ranged up to 14.6 ug/L, never exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 3.90 mg/L to 5.25 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from ?? g/m2 ash-free dry weight (AFDW) to ?? g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 87 mg/m2 to 161 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2, but not the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 8 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Eight of the 8 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. However, there is insufficient supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Warm Freshwater Habitat.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40678, Nitrate **Region 3**

Romero Creek

LOE ID:	10501
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40678, Nitrate **Region 3**

Romero Creek

LOE ID:	51422
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [

	315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40678, Nitrate **Region 3**

Romero Creek

LOE ID:	51421
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40678, Nitrate **Region 3**

Romero Creek

LOE ID:	51444
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40678, Nitrate **Region 3**

Romero Creek

LOE ID:	51458
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the

	criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40606**	**Region 3**
Romero Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the water quality objective for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 24 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40606, Oxygen, Dissolved **Region 3**

Romero Creek

LOE ID:	51460
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40606, Oxygen, Dissolved **Region 3**

Romero Creek

LOE ID:	51459
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40606, Oxygen, Dissolved **Region 3**

Romero Creek

LOE ID:	14143
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40606, Oxygen, Dissolved **Region 3**

Romero Creek

LOE ID:	14162
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]

Temporal Representation:	Data was collected on a single day 7/17/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40606, Oxygen, Dissolved **Region 3**

Romero Creek

LOE ID:	14161
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 7/17/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40606, Oxygen, Dissolved **Region 3**

Romero Creek

LOE ID:	14142
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40488**	**Region 3**
Romero Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Two of the 24 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 24 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40488, Turbidity **Region 3**

Romero Creek

LOE ID:	14163
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 7/17/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40488, Turbidity **Region 3**

Romero Creek

LOE ID:	14160
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Romero Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40488, Turbidity **Region 3**

Romero Creek

LOE ID:	51462
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Romero Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40604**	**Region 3**
Romero Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle, however the sample count in LOE #16154 should be revised to show zero of zero samples exceeding the evaluation guideline. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000,with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses, however, these samples will not be included in this decision because the laboratory method detection limit was above the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples are included in this decision because the laboratory method detection limit was above the guideline and the results were non-detect. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40604, Chlorpyrifos **Region 3**

Romero Creek

LOE ID:	16154
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	40665	Region 3
Romero Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40665, Diazinon	**Region 3**
Romero Creek	

LOE ID:	16849
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40675**	**Region 3**
Romero Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Two samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. invertebrate toxicity and vertebrate toxicity). Therefore, only 2 samples are available to assess this pollutant. Zero of the two samples resulted in a significant toxic effect to one or more test organisms and exceed the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed

to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples resulted in a significant toxic effect to one or more test organisms and exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40675, Toxicity **Region 3**

Romero Creek

LOE ID:	24478
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40675, Toxicity **Region 3**

Romero Creek

LOE ID:	24480
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Romero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Romero Creek was collected at 1 monitoring site [315ROM-Romero Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Robs Creek**
Water Body ID: **CAR3041301320080603120243**
Water Body Type: **River & Stream**

DECISION ID **40714** **Region 3**
Robs Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Water Contact Recreation water quality objective.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceed the Water Contact Recreation water quality objective. However, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40714, Escherichia coli (E. coli) **Region 3**
Robs Creek

LOE ID: 18299

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40714, Escherichia coli (E. coli) **Region 3**

Robs Creek

LOE ID:	18300
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40842 Region 3

Robs Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40842, Nitrate Region 3

Robs Creek

LOE ID:	18343
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40843**	**Region 3**
Robs Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the four samples exceed the water quality objectives for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the four samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40843, Oxygen, Dissolved **Region 3**

Robs Creek

LOE ID:	18017
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40843, Oxygen, Dissolved **Region 3**

Robs Creek

LOE ID:	18016
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40526**	**Region 3**
Robs Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. However, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 40526, Temperature, water **Region 3**

Robs Creek

LOE ID:	18671
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40482** **Region 3**

Robs Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the

Conclusion:	Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the each of the water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed the each of the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40482, pH **Region 3**

Robs Creek

LOE ID:	18956
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40482, pH **Region 3**

Robs Creek

LOE ID:	18954
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40482, pH **Region 3**

Robs Creek

LOE ID:	18953
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40482, pH **Region 3**

Robs Creek

LOE ID:	18905
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40482, pH **Region 3**

Robs Creek

LOE ID:	18955
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Robs Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Robs Creek was collected at 1 monitoring site [304-ROBSC-21 - Rob's Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Rinconada Creek**
Water Body ID: **CAR3098111420080611164701**
Water Body Type: **River & Stream**

DECISION ID **40743** **Region 3**
Rinconada Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use.The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40743, Escherichia coli (E. coli) **Region 3**
Rinconada Creek

LOE ID: 18438

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3
Number of Exceedances: 1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40743, Escherichia coli (E. coli) Region 3

Rinconada Creek

LOE ID:	18439
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]

Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40917 Region 3

Rinconada Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample exceeds the Water Contact Recreation water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceeds the Water Contact Recreation water quality objective. However, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40917, Fecal Coliform Region 3

Rinconada Creek

LOE ID:	17661
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40917, Fecal Coliform **Region 3**

Rinconada Creek

LOE ID:	17660
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40707 Region 3

Rinconada Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40707, Nitrate Region 3

Rinconada Creek

LOE ID:	18545
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40758**	**Region 3**
Rinconada Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the four samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the four samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40758, Oxygen, Dissolved **Region 3**

Rinconada Creek

LOE ID:	18079
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40758, Oxygen, Dissolved **Region 3**

Rinconada Creek

LOE ID:	18078
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40777**	**Region 3**
Rinconada Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use However, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 40777, Temperature, water **Region 3**

Rinconada Creek

LOE ID:	18707
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40791** **Region 3**

Rinconada Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the

Conclusion:	Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and One of the 3 samples also exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 3 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and One of the 3 samples also exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. However, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40791, pH **Region 3**

Rinconada Creek

LOE ID:	18919
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40791, pH **Region 3**

Rinconada Creek

LOE ID:	18920
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40791, pH **Region 3**

Rinconada Creek

LOE ID:	18901
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40791, pH **Region 3**

Rinconada Creek

LOE ID:	18902
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-

	RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40791, pH **Region 3**

Rinconada Creek

LOE ID:	18903
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rinconada Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rinconada Creek was collected at 1 monitoring site [309-RINCO-41 - Rinconada Pozo Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Prewitt Creek**
Water Body ID: **CAR3080006120080605165849**
Water Body Type: **River & Stream**

DECISION ID **40747** **Region 3**
Prewitt Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40747, Escherichia coli (E. coli) **Region 3**
Prewitt Creek

LOE ID: 18490

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40747, Escherichia coli (E. coli) **Region 3**

Prewitt Creek

LOE ID:	18491
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40923 Region 3

Prewitt Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40923, Nitrate Region 3

Prewitt Creek

LOE ID:	18358
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40238**	**Region 3**
Prewitt Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the water quality objectives for dissolved oxygen in Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the water quality objectives and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40238, Oxygen, Dissolved **Region 3**

Prewitt Creek

LOE ID:	18117
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40238, Oxygen, Dissolved **Region 3**

Prewitt Creek

LOE ID:	18132
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41352**	**Region 3**
Prewitt Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41352, Temperature, water **Region 3**

Prewitt Creek

LOE ID:	18834
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40924** **Region 3**

Prewitt Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40924, pH **Region 3**

Prewitt Creek

LOE ID:	18108
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40924, pH **Region 3**

Prewitt Creek

LOE ID:	18051
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40924, pH **Region 3**

Prewitt Creek

LOE ID:	18110
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40924, pH **Region 3**

Prewitt Creek

LOE ID:	18052
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40924, pH **Region 3**

Prewitt Creek

LOE ID:	18109
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Prewitt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prewitt Creek was collected at 1 monitoring site [308-PREWI-31 - Prewitt Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Porter Gulch Creek**
Water Body ID: **CAR3041301320080603122516**
Water Body Type: **River & Stream**

DECISION ID **40652** **Region 3**
Porter Gulch Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle.

One line of evidence is available in the administrative record to assess this pollutant. None of the 20 samples exceed the evaluation guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40652, Ammonia **Region 3**
Porter Gulch Creek

LOE ID: 13970

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304PRG_CCL - Porter Gulch at Mouth]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID **40519** **Region 3**

Porter Gulch Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence areavailable in the administrative record to assess this pollutant. None of the 42 samples exceed the Municipal & Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 42 samples exceed the Municipal & Domestic Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40519, Nitrate **Region 3**

Porter Gulch Creek

LOE ID:	13977
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304PRG_CCL - Porter Gulch at Mouth]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40519, Nitrate **Region 3**

Porter Gulch Creek

LOE ID:	19727
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/21/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**40520**	**Region 3**
Porter Gulch Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 2 samples exceed the Cold Freshwater Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

	Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 2 samples exceed the Cold Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40520, Oxygen, Dissolved **Region 3**

Porter Gulch Creek

LOE ID:	19827
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40520, Oxygen, Dissolved — Region 3

Porter Gulch Creek

LOE ID:	19811
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/16/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 40571 — Region 3

Porter Gulch Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40571, Temperature, water **Region 3**

Porter Gulch Creek

LOE ID:	19201
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [

	304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/21/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **40477** **Region 3**

Porter Gulch Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40477, Turbidity **Region 3**

Porter Gulch Creek

LOE ID:	19414
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-4/14/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40477, Turbidity **Region 3**

Porter Gulch Creek

LOE ID:	19415
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-4/14/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 40521 Region 3

Porter Gulch Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 3 samples exceed each of the water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed each of the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40521, pH Region 3

Porter Gulch Creek

LOE ID:	19516
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/21/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40521, pH **Region 3**

Porter Gulch Creek

LOE ID:	19494
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/21/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40521, pH **Region 3**

Porter Gulch Creek

LOE ID:	19493
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/21/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40521, pH **Region 3**

Porter Gulch Creek

LOE ID:	19492

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/21/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40521, pH **Region 3**

Porter Gulch Creek

LOE ID:	19517
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996

	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/21/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**40676**	**Region 3**
Porter Gulch Creek		

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Thirteen of 39 samples exceeded the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this supports rejection of the null hypothesis. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of 39 samples exceeded the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40676, Enterococcus **Region 3**

Porter Gulch Creek

LOE ID:	14195
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 13 of 39 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304PRG_CCL - Porter Gulch at Mouth]
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40676, Enterococcus **Region 3**

Porter Gulch Creek

LOE ID:	14196
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304PRG_CCL - Porter Gulch at Mouth]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID	**40518**	**Region 3**
Porter Gulch Creek		

Pollutant:	**Escherichi coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-four of 36 samples exceeded the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40518, Escherichia coli (E. coli) **Region 3**

Porter Gulch Creek

LOE ID:	19722
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-8/11/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40518, Escherichia coli (E. coli) **Region 3**

Porter Gulch Creek

LOE ID:	19706
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304POR_SCC - PORTER G at MOUTH at NEW B]
Temporal Representation:	Data was collected over the time period 12/11/2001-8/11/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40518, Escherichia coli (E. coli) **Region 3**

Porter Gulch Creek

LOE ID:	14157
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 19 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304PRG_CCL - Porter Gulch at Mouth]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40518, Escherichia coli (E. coli) **Region 3**

Porter Gulch Creek

LOE ID:	14158
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Porter Gulch Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Porter Gulch Creek was collected at 1 monitoring site [304PRG_CCL - Porter Gulch at Mouth]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Port San Luis**
Water Body ID: **CAB310250122008062015243 8**
Water Body Type: **Bay & Harbor**

DECISION ID **50600** **Region 3**
Port San Luis

Pollutant: **Aldrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50600, Aldrin **Region 3**
Port San Luis

LOE ID: 56848

Pollutant: Aldrin
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Aldrin. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50600, Aldrin **Region 3**

Port San Luis

LOE ID:	56844
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Aldrin. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The

	flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40859**	**Region 3**
Port San Luis		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero out of four shellfish tissue samples exceeded the evaluation guideline. Zero out of two fish tissue samples exceeded the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No fish or shellfish tissue samples exceeded the evaluation guideline and zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40859, Cadmium **Region 3**

Port San Luis

LOE ID:	15441
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40859, Cadmium **Region 3**

Port San Luis

LOE ID:	15442
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40859, Cadmium **Region 3**

Port San Luis

LOE ID:	56855
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in fish tissue is 2.2 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40859, Cadmium **Region 3**

Port San Luis

LOE ID:	56854
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged. The three replicates for each station were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40859, Cadmium **Region 3**

Port San Luis

LOE ID:	77422
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: Both samples exceeded the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to

	levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	**50662**	**Region 3**
Port San Luis		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero out of four shellfish tissue samples exceeded the evaluation guideline. Zero out of two fish tissue samples exceeded the evaluation guidelines. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish or shellfish tissue samples exceeded the evaluation guidelines. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50662, Chlordane **Region 3**

Port San Luis

LOE ID:	77423
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: Both samples exceeded the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is

	a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50662, Chlordane **Region 3**

Port San Luis

LOE ID:	56862
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50662, Chlordane — Region 3

Port San Luis

LOE ID:	56860
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50662, Chlordane — Region 3

Port San Luis

LOE ID:	56856
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50662, Chlordane **Region 3**

Port San Luis

LOE ID:	56861
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47889**	**Region 3**
Port San Luis		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of four shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. Zero out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No shellfish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47889, Chlorpyrifos **Region 3**

Port San Luis

LOE ID:	56866
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment

	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47889, Chlorpyrifos **Region 3**

Port San Luis

LOE ID:	56867
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San

	Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47889, Chlorpyrifos **Region 3**

Port San Luis

LOE ID:	77424
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends

(NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	50732	Region 3
Port San Luis		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero out of four shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. One out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of four shellfish tissue samples exceeded the evaluation guideline, one of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use, and zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50732, DDT (Dichlorodiphenyltrichloroethane)	**Region 3**
Port San Luis	

LOE ID:	77425
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50732, DDT (Dichlorodiphenyltrichloroethane) Region 3

Port San Luis

LOE ID:	56853
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50732, DDT (Dichlorodiphenyltrichloroethane) Region 3

Port San Luis

LOE ID:	56857
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004

	Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50732, DDT (Dichlorodiphenyltrichloroethane) Region 3

Port San Luis

LOE ID:	56852
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50732, DDT (Dichlorodiphenyltrichloroethane) Region 3

Port San Luis

LOE ID:	56858
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for DDT, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)

Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47177** **Region 3**

Port San Luis

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guidelines applied to protect for the shellfish harvesting beneficial use. Zero out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No shellfish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47177, Diazinon **Region 3**

Port San Luis

LOE ID:	56871
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in fish tissue is 1,500 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47177, Diazinon **Region 3**

Port San Luis

LOE ID:	56868
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in shellfish tissue is 2,300 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50676**	**Region 3**
Port San Luis		

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the

Conclusion:	Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero out of four shellfish tissue samples exceeded the evaluation guidelines applied to protect for the shellfish harvesting beneficial use. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50676, Endosulfan **Region 3**

Port San Luis

LOE ID:	56817
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endosulfan. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.

	There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50676, Endosulfan **Region 3**

Port San Luis

LOE ID:	56818
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endosulfan. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San

	Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50676, Endosulfan **Region 3**

Port San Luis

LOE ID:	56816
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	

QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50676, Endosulfan **Region 3**

Port San Luis

LOE ID:	56819
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endosulfan. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50676, Endosulfan **Region 3**

Port San Luis

LOE ID:	77431
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID **40523** **Region 3**

Port San Luis

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Zero out of four shellfish tissue samples exceeded the evaluation guideline. Zero out of two fish tissue samples exceeded the evaluation guidelines. Zero out of seven sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No fish or shellfish tissue samples exceeded the evaluation guideline and zero out of seven sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40523, Endrin **Region 3**

Port San Luis

LOE ID:	77433
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight

	basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40523, Endrin **Region 3**

Port San Luis

LOE ID:	56820
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40523, Endrin **Region 3**

Port San Luis

LOE ID:	56823
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.

	There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40523, Endrin **Region 3**

Port San Luis

LOE ID:	56822
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington,

	D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40523, Endrin **Region 3**

Port San Luis

LOE ID:	56821
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 40523, Endrin **Region 3**

Port San Luis

LOE ID:	16589
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40523, Endrin **Region 3**

Port San Luis

LOE ID:	16590
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50678**	**Region 3**
Port San Luis		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50678, Heptachlor **Region 3**

Port San Luis

LOE ID:	56825
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Heptachlor. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50678, Heptachlor **Region 3**

Port San Luis

LOE ID:	56824
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Heptachlor. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50679** **Region 3**

Port San Luis

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guidelines applied to protect for the shellfish harvesting beneficial use. Two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50679, Heptachlor epoxide **Region 3**

Port San Luis

LOE ID:	56828
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to

	determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Heptachlor epoxide. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50679, Heptachlor epoxide **Region 3**

Port San Luis

LOE ID:	56829
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50679, Heptachlor epoxide **Region 3**

Port San Luis

LOE ID:	56827
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Heptachlor epoxide. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50679, Heptachlor epoxide **Region 3**

Port San Luis

LOE ID:	56826
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

	Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50679, Heptachlor epoxide **Region 3**

Port San Luis

LOE ID:	77436
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.

Environmental Conditions:

QAPP Information: "Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	50681	Region 3
Port San Luis		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of four shellfish tissue samples exceeded the evaluation guidelines applied to protect for the shellfish harvesting beneficial use. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50681, Hexachlorobenzene/ HCB	Region 3
Port San Luis	

LOE ID:	77439
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50681, Hexachlorobenzene/ HCB **Region 3**

Port San Luis

LOE ID:	56831
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Hexachlorobenzene. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50681, Hexachlorobenzene/ HCB **Region 3**

Port San Luis

LOE ID:	56830
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not

	exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50715**	**Region 3**
Port San Luis		

Pollutant:	**Hexachlorocyclohexane (HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two shellfish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50715, Hexachlorocyclohexane (HCH) **Region 3**

Port San Luis

LOE ID:	77435
Pollutant:	Hexachlorocyclohexane (HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50722	Region 3
Port San Luis		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. Zero out of two fish tissue samples exceeded the evaluation guidelines applied to protect for freshwater habitat and the commercial beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two shellfish tissue samples and zero out of two fish tissue samples exceeded the evaluation guidelines. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50722, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 3

Port San Luis

LOE ID:	56835
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50722, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

Region 3

Port San Luis

LOE ID:	56832
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50722, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Port San Luis

LOE ID:	56834
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50722, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Port San Luis

LOE ID:	56833
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40500	Region 3
Port San Luis		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero out of four shellfish tissue samples exceeded the evaluation guideline. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No fish or shellfish tissue samples exceeded the evaluation guideline and zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40500, Mercury **Region 3**

Port San Luis

LOE ID:	56836
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) with a consumption rate of 21 g/day is 0.20 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United

	States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40500, Mercury **Region 3**

Port San Luis

LOE ID:	56837
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Mercury. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40500, Mercury **Region 3**

Port San Luis

LOE ID:	77441
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The both samples did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40500, Mercury **Region 3**

Port San Luis

LOE ID:	17219

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40500, Mercury **Region 3**

Port San Luis

LOE ID:	17220
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 6 of 6

	samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50723**	**Region 3**
Port San Luis		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero shellfish tissue samples exceeded the evaluation guideline. Four samples were not used in the assessment because the laboratory data reporting limit was above the evaluation guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. Two samples were not used in the assessment because the laboratory data reporting limit was above the evaluation guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero fish and shellfish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50723, Mirex **Region 3**

Port San Luis

LOE ID:	77442
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007
Environmental Conditions:	

QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50723, Mirex **Region 3**

Port San Luis

LOE ID:	56839
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50723, Mirex **Region 3**

Port San Luis

LOE ID:	56838
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50729	Region 3
Port San Luis		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of four shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of four shellfish tissue samples and zero out of two fish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50729, Selenium	**Region 3**
Port San Luis	

LOE ID:	56847
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to

	determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged. The three replicates for each station were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50729, Selenium **Region 3**

Port San Luis

LOE ID:	56851
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Selenium. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50729, Selenium **Region 3**

Port San Luis

LOE ID:	77448
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this

Guideline Reference:	micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008) Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50735	Region 3
Port San Luis		

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. Two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of zero shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use, zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use, and zero out of two fish tissue samples

exceeded the evaluation guideline applied to protect for the freshwater habitat beneficial uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50735, Toxaphene **Region 3**

Port San Luis

LOE ID:	56865
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Toxaphene. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in fish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50735, Toxaphene **Region 3**

Port San Luis

LOE ID:	56859
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in shellfish tissue is 6.5 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50735, Toxaphene — Region 3

Port San Luis

LOE ID:	56863
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxaphene. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50735, Toxaphene — Region 3

Port San Luis

LOE ID:	56864
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxaphene. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50736**	**Region 3**
Port San Luis		

Pollutant:	**Tributyltin TBT (Tributylstanne)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use and zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50736, Tributyltin TBT (Tributylstanne) **Region 3**

Port San Luis

LOE ID:	56870
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Tributyltin as Sn. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in fish tissue is 0.66 ppm. This

	screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50736, Tributyltin TBT (Tributylstanne) **Region 3**

Port San Luis

LOE ID:	56869
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in shellfish tissue is 1 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

	Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40886	Region 3
Port San Luis		

Pollutant:	**Arsenic**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Five lines of evidence are available in the administrative record to assess this pollutant. Two out of two fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. Four out of four shellfish tissue samples exceeded the evaluation guideline applied to protect the shellfish harvesting beneficial use. Zero out of six sediment samples exceeded the evaluation guideline. For the cold and warm freshwater habitat beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Additionally, four out of four shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 40886, Arsenic **Region 3**

Port San Luis

LOE ID:	77421
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: Both samples exceeded the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program

	Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40886, Arsenic **Region 3**

Port San Luis

LOE ID:	56849
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline. The field duplicates for station 310SNLS01 were averaged. The three replicates for each station were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40886, Arsenic **Region 3**

Port San Luis

LOE ID:	56850
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Arsenic. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in fish tissue is 0.0034 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40886, Arsenic **Region 3**

Port San Luis

LOE ID:	15656

Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40886, Arsenic **Region 3**

Port San Luis

LOE ID:	15657
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6

	samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40568**	**Region 3**
Port San Luis		

Pollutant:	**Dieldrin**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Three out three shellfish tissue samples exceeded the evaluation guideline applied to protect the shellfish harvesting beneficial use. One sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. Zero of two fish tissue samples exceeded the evaluation guideline applied to protect the freshwater habitat beneficial uses. Zero of zero fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. Zero out of seven sediment samples exceeded the evaluation guideline. With the exception of the shellfish harvesting beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three out of three shellfish tissue samples exceeded the evaluation guideline and this exceeds the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 40568, Dieldrin **Region 3**

Port San Luis

LOE ID:	16726
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40568, Dieldrin **Region 3**

Port San Luis

LOE ID:	16727
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40568, Dieldrin **Region 3**

Port San Luis

LOE ID:	56815
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Dieldrin. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Two samples were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40568, Dieldrin **Region 3**

Port San Luis

LOE ID:	56814
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40568, Dieldrin **Region 3**

Port San Luis

LOE ID:	56873
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or

	combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40568, Dieldrin **Region 3**

Port San Luis

LOE ID:	56872
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: One sample exceeded the guideline. Each sample consisted of 45 California mussels. One sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen

	therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40568, Dieldrin **Region 3**

Port San Luis

LOE ID:	77429
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: Both results did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs,

Selenium, and Toxaphene

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	50724	Region 3
Port San Luis		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Two out of four shellfish tissue samples exceeded the evaluation guideline applied to protect the shellfish harvesting beneficial use. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. For the commercial beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of four shellfish tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50724, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Port San Luis

LOE ID:	77443
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: Both results did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50724, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Port San Luis

LOE ID:	56840
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50724, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Port San Luis

LOE ID:	56841
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PAH, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in fish tissue is 0.7 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50726	Region 3
Port San Luis		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Three out of four shellfish tissue samples exceeded the evaluation guideline applied to protect the shellfish harvesting beneficial use. Two out of two fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. The same two fish tissue samples do not exceed the evaluation guideline applied to protect for the freshwater habitat beneficial use. For the freshwater habitat beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of four shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use and two out of two fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50726, PCBs (Polychlorinated biphenyls)	Region 3
Port San Luis	

LOE ID:	56845
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PCB, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50726, PCBs (Polychlorinated biphenyls) **Region 3**

Port San Luis

LOE ID:	56843
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PCB, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The

	flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50726, PCBs (Polychlorinated biphenyls) Region 3

Port San Luis

LOE ID:	56846
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for PCB, Total. Three composites (20 - 35 fish per composite) were generated from one species: speckled sanddab. The field duplicates for station 310SNLS25 were averaged. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 2 monitoring sites [Port San Luis random site 25 - 310SNLS25, Port San Luis random site 1 - 310SNLS01]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/22/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50726, PCBs (Polychlorinated biphenyls) Region 3

Port San Luis

LOE ID:	56842
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Port San Luis to determine beneficial use support and results are as follows: One sample did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The field duplicates for station 310SNLS01 were averaged. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 310SNLS01 and 310SNLS25. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50726, PCBs (Polychlorinated biphenyls) **Region 3**

Port San Luis

LOE ID:	77445
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Port San Luis to determine beneficial use support and results are as follows: The results exceeded the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site SLSL.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 11/23/2007 and 12/21/2008.
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 40536 **Region 3**

Port San Luis

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40536, Anthracene **Region 3**

Port San Luis

LOE ID:	15844
Pollutant:	Anthracene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40536, Anthracene **Region 3**

Port San Luis

LOE ID:	15845
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40491**	**Region 3**
Port San Luis		

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40491, Benzo(a)anthracene **Region 3**

Port San Luis

LOE ID:	15710
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40491, Benzo(a)anthracene **Region 3**

Port San Luis

LOE ID:	15709
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40481**	**Region 3**
Port San Luis		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40481, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Port San Luis

LOE ID:	15592
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40481, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Port San Luis

LOE ID:	15593
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40584** **Region 3**

Port San Luis

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 17 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40584, Chlorophyll-a **Region 3**

Port San Luis

LOE ID:	16182
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40584, Chlorophyll-a **Region 3**

Port San Luis

LOE ID:	16181
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40682**	**Region 3**
Port San Luis		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess Chromium concentrations and two lines of evidence are available in the administrative record to assess sediment toxicity. Three of 6 sediment samples exceed the Evaluation Guideline for Chromium (MacDonald et al. 2000). However, none of the 6 samples were toxic to test organisms. Therefore, Chromium cannot be associated with toxic effects in this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. However, there are an insufficient number of samples to make a "use rating" decision. Central Coast Water Board staff require a minimum of 16 samples to make a "use rating" decision of Fully Supporting. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples were toxic to test organisms. Therefore, Chromium cannot be associated with toxic effects in this waterbody. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40682, Chromium **Region 3**

Port San Luis

LOE ID:	24624
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40682, Chromium **Region 3**

Port San Luis

LOE ID:	23963
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40682, Chromium **Region 3**

Port San Luis

LOE ID:	15896
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40682, Chromium **Region 3**

Port San Luis

LOE ID:	15883
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40680** **Region 3**

Port San Luis

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40680, Chrysene (C1-C4) **Region 3**

Port San Luis

LOE ID:	15980
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40680, Chrysene (C1-C4) **Region 3**

Port San Luis

LOE ID:	15981
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40685**	**Region 3**
Port San Luis		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40685, Copper **Region 3**

Port San Luis

LOE ID:	16064
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40685, Copper **Region 3**

Port San Luis

LOE ID:	16051

Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40573**	**Region 3**
Port San Luis		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40573, Fluoranthene **Region 3**

Port San Luis

LOE ID:	16424
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40573, Fluoranthene **Region 3**

Port San Luis

LOE ID:	16437
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40653** **Region 3**

Port San Luis

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40653, Fluorene **Region 3**

Port San Luis

LOE ID:	16505
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40653, Fluorene **Region 3**

Port San Luis

LOE ID:	16506
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40574** **Region 3**

Port San Luis

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40574, Lead **Region 3**

Port San Luis

LOE ID:	17134
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40574, Lead **Region 3**

Port San Luis

LOE ID:	17135
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40560**	**Region 3**
Port San Luis		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40560, Naphthalene	**Region 3**

Port San Luis

LOE ID:	17273
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40560, Naphthalene **Region 3**

Port San Luis

LOE ID:	17286
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40511**	**Region 3**
Port San Luis		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40511, Nickel **Region 3**

Port San Luis

LOE ID:	17108
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40511, Nickel **Region 3**

Port San Luis

LOE ID:	17109
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40561**	**Region 3**
Port San Luis		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40561, Phenanthrene **Region 3**

Port San Luis

LOE ID:	16954
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]

Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40561, Phenanthrene **Region 3**

Port San Luis

LOE ID:	16941
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40885** **Region 3**

Port San Luis

Pollutant: **Pyrene**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 7 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40885, Pyrene **Region 3**

Port San Luis

LOE ID:	17071
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40885, Pyrene **Region 3**

Port San Luis

LOE ID:	17072
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40624** **Region 3**

Port San Luis

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Zero of the six samples exceed the water quality objective for aquatic life protection (i.e. a significant toxic effect to the test organisms). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40624, Toxicity **Region 3**

Port San Luis

LOE ID:	24624
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40624, Toxicity **Region 3**

Port San Luis

LOE ID:	23963
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40626**	**Region 3**
Port San Luis		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial

uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40626, Zinc **Region 3**

Port San Luis

LOE ID:	17701
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40626, Zinc **Region 3**

Port San Luis

LOE ID:	17700
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Port San Luis to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Port San Luis was collected at 6 monitoring sites [310SNLS25 - Port San Luis, 310SNLS17 - Port San Luis, 310SNLS09 - Port San Luis, 310SNLS01 - Port San Luis, 310SNLS21 - Port San Luis, 310SNLS05 - Port San Luis]
Temporal Representation:	Data was collected on a single day 6/22/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Plaskett Creek**
Water Body ID: **CAR3080006120080605170111**
Water Body Type: **River & Stream**

DECISION ID **40855** **Region 3**
Plaskett Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40855, Escherichia coli (E. coli) **Region 3**
Plaskett Creek

LOE ID: 17580

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40855, Escherichia coli (E. coli) **Region 3**

Plaskett Creek

LOE ID:	18455
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40868 **Region 3**

Plaskett Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40868, Nitrate **Region 3**

Plaskett Creek

LOE ID:	18339
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40867**	**Region 3**
Plaskett Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Warm or Cold Freshwater Habitat water quality objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Warm or Cold Freshwater Habitat water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40867, Oxygen, Dissolved **Region 3**

Plaskett Creek

LOE ID:	18095
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40867, Oxygen, Dissolved **Region 3**

Plaskett Creek

LOE ID:	18094
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40866**	**Region 3**
Plaskett Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation:	No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40866, Temperature, water **Region 3**

Plaskett Creek

LOE ID:	18816
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40787** **Region 3**

Plaskett Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40787, pH **Region 3**

Plaskett Creek

LOE ID:	18031
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40787, pH — Region 3

Plaskett Creek

LOE ID:	18030
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40787, pH — Region 3

Plaskett Creek

LOE ID:	18069
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and

	results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40787, pH **Region 3**

Plaskett Creek

LOE ID:	18029
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40787, pH **Region 3**

Plaskett Creek

LOE ID:	18068
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Plaskett Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Plaskett Creek was collected at 1 monitoring site [308-PLASK-31 - Plaskett Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Partington Creek**
Water Body ID: **CAR3080004120080605162344**
Water Body Type: **River & Stream**

DECISION ID **41159** **Region 3**
Partington Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 4 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 4 samples exceed the water quality objective for Non-Contact Recreation. However, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41159, Escherichia coli (E. coli) **Region 3**
Partington Creek

LOE ID: 18407

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41159, Escherichia coli (E. coli) **Region 3**

Partington Creek

LOE ID:	18408
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41373 Region 3

Partington Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal & Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal & Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41373, Nitrate Region 3

Partington Creek

LOE ID:	18207
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41164**	**Region 3**
Partington Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the Cold Freshwater Habitat water quality objective. But, none of the samples exceeded the Warm Freshwater Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 4 samples exceed the Cold Freshwater Habitat water quality objective. But, none of the samples exceeded the Warm Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41164, Oxygen, Dissolved **Region 3**

Partington Creek

LOE ID:	18256
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41164, Oxygen, Dissolved **Region 3**

Partington Creek

LOE ID:	18255
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41165**	**Region 3**
Partington Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples

	is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41165, Temperature, water **Region 3**

Partington Creek

LOE ID:	18821
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41351** **Region 3**

Partington Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41351, pH **Region 3**

Partington Creek

LOE ID:	18717
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41351, pH **Region 3**

Partington Creek

LOE ID:	19007
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41351, pH **Region 3**

Partington Creek

LOE ID:	18718
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41351, pH **Region 3**

Partington Creek

LOE ID:	19009
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41351, pH **Region 3**

Partington Creek

LOE ID:	19008
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Partington Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Partington Creek was collected at 1 monitoring site [308-PARTI-31 - Partington Canyon at Tan Bark trail]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pajaro River Estuary**
Water Body ID: **CAE30510030200806041546 34**
Water Body Type: **Estuary**

DECISION ID **53795** **Region 3**
Pajaro River Estuary

Pollutant: **Alachlor**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty water samples exceed the evaluation guideline applied to protect for aquatic life beneficial uses. Zero of the thirty water samples exceed the evaluation guideline applied to protect for the municipal beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero out of thirty samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53795, Alachlor **Region 3**
Pajaro River Estuary

LOE ID: 94194

Pollutant: Alachlor
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 30

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53795, Alachlor **Region 3**

Pajaro River Estuary

LOE ID:	94272
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53795, Alachlor **Region 3**

Pajaro River Estuary

LOE ID:	94273
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **53796** **Region 3**

Pajaro River Estuary

Pollutant:	**Atrazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the aquatic life evaluation guideline. Zero out of thirty water samples exceeded the evaluation guideline applied to protect the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53796, Atrazine **Region 3**

Pajaro River Estuary

LOE ID:	94279
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Atrazine is 0.001 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water

Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53796, Atrazine **Region 3**

Pajaro River Estuary

LOE ID:	94190
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Atrazine is 43 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53796, Atrazine **Region 3**

Pajaro River Estuary

LOE ID:	94274
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Atrazine is 43 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**53797**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant; three LOEs summarize water and two LOEs summarize sediment. Two out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of nine sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the beneficial use rating is set to 'insufficient information' for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two water samples and zero sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53797, Bifenthrin **Region 3**

Pajaro River Estuary

LOE ID:	94195
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for BIFENTHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53797, Bifenthrin **Region 3**

Pajaro River Estuary

LOE ID:	94275
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for BIFENTHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53797, Bifenthrin **Region 3**

Pajaro River Estuary

LOE ID:	94103
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53797, Bifenthrin **Region 3**

Pajaro River Estuary

LOE ID:	94276
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for BIFENTHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The genus mean acute value for a mysid (Mysidopsis bahia) of 0.0034 ug/L (DFG 00-6, 2000).
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response. Administrative Report 00-6
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53797, Bifenthrin **Region 3**

Pajaro River Estuary

LOE ID:	94069
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [

	Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 53798 Region 3

Pajaro River Estuary

Pollutant:	**Butylate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the thirty samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53798, Butylate Region 3

Pajaro River Estuary

LOE ID:	94196
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS and SWAMP QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53798, Butylate **Region 3**

Pajaro River Estuary

LOE ID:	94277
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS and SWAMP QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 53799 Region 3

Pajaro River Estuary

Pollutant:	**Carbaryl**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for drinking water. One of the nine samples exceed the evaluation guidelines for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines for drinking water. One of the nine samples exceed the evaluation guidelines for aquatic life protection. Neither of these exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53799, Carbaryl Region 3

Pajaro River Estuary

LOE ID:	94280
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for carbaryl is 40 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53799, Carbaryl **Region 3**

Pajaro River Estuary

LOE ID:	94197
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53799, Carbaryl **Region 3**

Pajaro River Estuary

LOE ID:	94278
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 53800 **Region 3**

Pajaro River Estuary

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the aquatic life evaluation guideline. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline for aquatic life and zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53800, Carbofuran **Region 3**

Pajaro River Estuary

LOE ID:	94282
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation: Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:
QAPP Information: USGS QAPP
QAPP Information Reference(s): 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53800, Carbofuran **Region 3**

Pajaro River Estuary

LOE ID: 94281

Pollutant: Carbofuran
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 30
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBOFURAN.
Data Reference: Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline: The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference: Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System

Spatial Representation: Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation: Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:
QAPP Information: USGS QAPP
QAPP Information Reference(s): 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53800, Carbofuran **Region 3**

Pajaro River Estuary

LOE ID: 94198

Pollutant: Carbofuran

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54037**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Chlorothalonil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the thirty samples exceed the evaluation guideline for drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the thirty samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54037, Chlorothalonil **Region 3**

Pajaro River Estuary

LOE ID:	94283
Pollutant:	Chlorothalonil
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Chlorothalonil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the 2006 USEPA Drinking Water Standards and Health Advisories, the Ten-day Health Advisory for Chlorothalonil is 200 ug/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **40731** **Region 3**

Pajaro River Estuary

Pollutant: **Chlorpyrifos**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine sediment samples exceed the evaluation guideline for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Two of the 32 water samples exceed the evaluation guideline for protection of aquatic life uses. Zero of the 30 water samples exceed the evaluation guideline for the protection of Municipal and Domestic Supply uses (drinking water). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine sediment samples exceed the evaluation guideline for protection of aquatic life uses. Two of the 32 water samples exceed the evaluation guideline for protection of aquatic life uses. Zero of the 30 water samples exceed the evaluation guideline for the protection of Municipal and Domestic Supply uses (drinking water). These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40731, Chlorpyrifos **Region 3**

Pajaro River Estuary

LOE ID:	94070
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 40731, Chlorpyrifos **Region 3**

Pajaro River Estuary

LOE ID:	94199
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40731, Chlorpyrifos **Region 3**

Pajaro River Estuary

LOE ID:	94104
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 40731, Chlorpyrifos **Region 3**

Pajaro River Estuary

LOE ID:	94284
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40731, Chlorpyrifos **Region 3**

Pajaro River Estuary

LOE ID:	94286
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine

	beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40731, Chlorpyrifos **Region 3**

Pajaro River Estuary

LOE ID:	18674
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 1 monitoring site [DHS015 - Pajaro River Lagoon located in the Watsonville Slough]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40731, Chlorpyrifos **Region 3**

Pajaro River Estuary

LOE ID:	18675
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 1 monitoring site [DHS015 - Pajaro River Lagoon located in the Watsonville Slough]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 53801 **Region 3**

Pajaro River Estuary

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceeded the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53801, Cyfluthrin **Region 3**

Pajaro River Estuary

LOE ID:	94055
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53801, Cyfluthrin **Region 3**

Pajaro River Estuary

LOE ID:	94071
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).

Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 53802 Region 3

Pajaro River Estuary

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 water samples exceed the evaluation guideline (Fojut et al. 2012) for aquatic life protection. Zero of the nine sediment samples exceed the evaluation guideline (Amweg et al., 2005) for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the water samples or sediment samples exceed the evaluation guidelines for aquatic life uses and therefore do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53802, Cyhalothrin, Lambda Region 3

Pajaro River Estuary

LOE ID:	94081
Pollutant:	Cyhalothrin, Lambda

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cyhalothrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53802, Cyhalothrin, Lambda **Region 3**

Pajaro River Estuary

LOE ID:	94287
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Cyhalothrin, Lambda.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53802, Cyhalothrin, Lambda **Region 3**

Pajaro River Estuary

LOE ID:	94121
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Cyhalothrin, Lambda.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53802, Cyhalothrin, Lambda **Region 3**

Pajaro River Estuary

LOE ID:	94105
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cyhalothrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **53803** **Region 3**

Pajaro River Estuary

Pollutant: **Cypermethrin**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 water samples exceed the evaluation guideline (Fojut et al. 2012) for aquatic life protection. Zero of the nine sediment samples exceed the evaluation guideline (Amweg et al., 2005) for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the water samples or sediment samples exceed the evaluation guidelines for aquatic life uses and therefore do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53803, Cypermethrin **Region 3**

Pajaro River Estuary

LOE ID:	94106
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cypermethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53803, Cypermethrin **Region 3**

Pajaro River Estuary

LOE ID:	94289
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CYPERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The genus mean acute value for a grass shrimp (Palaemonetes pugio) of 0.016 ug/L (DFG 00-6, 2000).
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response.

	Administrative Report 00-6
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53803, Cypermethrin **Region 3**

Pajaro River Estuary

LOE ID:	94288
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CYPERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53803, Cypermethrin **Region 3**

Pajaro River Estuary

LOE ID:	94072

Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cypermethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53803, Cypermethrin **Region 3**

Pajaro River Estuary

LOE ID:	94122
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for

	CYPERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54110**	**Region 3**
Pajaro River Estuary		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 water samples exceed the evaluation guidelines for drinking water uses. Zero of the nine sediment samples exceed the evaluation guideline for aquatic life protection but the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 30 water samples exceed the evaluation guidelines for drinking water uses and zero of the nine sediment samples exceed the evaluation guideline for aquatic life protection. These do not

exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54110, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Pajaro River Estuary

LOE ID:	94117
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54110, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Pajaro River Estuary

LOE ID:	94139
Pollutant:	DDD (Dichlorodiphenyldichloroethane)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for p p' DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00083 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54110, DDD (Dichlorodiphenyldichloroethane) Region 3

Pajaro River Estuary

LOE ID:	94031
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 53804 Region 3

Pajaro River Estuary

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 water samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. Zero of the nine sediment samples exceed the evaluation guideline for aquatic life protection but the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 30 water samples exceed the evaluation guidelines for aquatic life uses and drinking water uses and zero of the nine sediment samples exceed the evaluation guideline for aquatic life protection. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53804, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River Estuary

LOE ID:	94135
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for p p' DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53804, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Pajaro River Estuary

LOE ID:	94141
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for p p' DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53804, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River Estuary

LOE ID:	94089
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53804, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River Estuary

LOE ID:	94142
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for p p' DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53804, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River Estuary

LOE ID:	94119
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53804, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River Estuary

LOE ID:	94033
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53804, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River Estuary

LOE ID:	94039
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53804, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River Estuary

LOE ID:	94146

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for p p' DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in saline water is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**53805**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 water samples exceed the evaluation guidelines for drinking water and aquatic life uses. In addition, zero of the nine sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53805, Deltamethrin **Region 3**

Pajaro River Estuary

LOE ID:	94074
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53805, Deltamethrin **Region 3**

Pajaro River Estuary

LOE ID:	94208
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53805, Deltamethrin **Region 3**

Pajaro River Estuary

LOE ID:	94290
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53805, Deltamethrin **Region 3**

Pajaro River Estuary

LOE ID:	94108
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53805, Deltamethrin **Region 3**

Pajaro River Estuary

LOE ID:	94124
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53805, Deltamethrin **Region 3**

Pajaro River Estuary

LOE ID:	94123
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54066** **Region 3**

Pajaro River Estuary

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54066, Disulfoton **Region 3**

Pajaro River Estuary

LOE ID:	94212
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DISULFOTON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54042 Region 3

Pajaro River Estuary

Pollutant:	**Esfenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54042, Esfenvalerate Region 3

Pajaro River Estuary

LOE ID:	94076
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for

	esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54042, Esfenvalerate **Region 3**

Pajaro River Estuary

LOE ID:	94110
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54042, Esfenvalerate **Region 3**

Pajaro River Estuary

LOE ID:	94126
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54042, Esfenvalerate **Region 3**

Pajaro River Estuary

LOE ID:	94213
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for

	ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54043**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Ethalfluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54043, Ethalfluralin — Region 3

Pajaro River Estuary

LOE ID:	94127
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54043, Ethalfluralin — Region 3

Pajaro River Estuary

LOE ID:	94214
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine

	beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54044**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Zero of the nine sediment samples exceed the evaluation guideline for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54044, Fenpropathrin **Region 3**

Pajaro River Estuary

LOE ID:	94082
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54044, Fenpropathrin **Region 3**

Pajaro River Estuary

LOE ID:	94128

Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54044, Fenpropathrin **Region 3**

Pajaro River Estuary

LOE ID:	94116
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54044, Fenpropathrin **Region 3**

Pajaro River Estuary

LOE ID:	94215
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54045 Region 3

Pajaro River Estuary

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of the nine sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54045, Fipronil Region 3

Pajaro River Estuary

LOE ID:	94111
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fipronil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54045, Fipronil **Region 3**

Pajaro River Estuary

LOE ID:	94077
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fipronil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	54046	Region 3
Pajaro River Estuary		

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine sediment samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54046, Fipronil Sulfide **Region 3**

Pajaro River Estuary

LOE ID:	94078
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fipronil sulfide.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54046, Fipronil Sulfide **Region 3**

Pajaro River Estuary

LOE ID:	94112
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fipronil sulfide.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	54047	Region 3
Pajaro River Estuary		

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine sediment samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported

and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54047, Fipronil Sulfone **Region 3**

Pajaro River Estuary

LOE ID:	94113
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [

	Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54047, Fipronil Sulfone **Region 3**

Pajaro River Estuary

LOE ID:	94079
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **54048** **Region 3**

Pajaro River Estuary

Pollutant:	**Hexazinone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54048, Hexazinone **Region 3**

Pajaro River Estuary

LOE ID:	94129
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life

	EC50 for Hexazinone is 6.8 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54048, Hexazinone **Region 3**

Pajaro River Estuary

LOE ID:	94216
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54049** **Region 3**

Pajaro River Estuary

Pollutant:	**Iprodione**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the thirty samples exceed the evaluation guideline for drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54049, Iprodione **Region 3**

Pajaro River Estuary

LOE ID:	94217
Pollutant:	Iprodione
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Iprodione.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water

	health advisory level for Iprodione is 280 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water with 0.04 mg/kg/day as the reference dose. An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Summary for Iprodione
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54051 Region 3

Pajaro River Estuary

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54051, Methidathion Region 3

Pajaro River Estuary

LOE ID:	94220
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54051, Methidathion **Region 3**

Pajaro River Estuary

LOE ID:	94221
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54051, Methidathion **Region 3**

Pajaro River Estuary

LOE ID:	94131
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	54052	Region 3
Pajaro River Estuary		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water uses. Zero out of nine sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water and zero out of nine sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54052, Methyl Parathion	**Region 3**
Pajaro River Estuary	

LOE ID:	94080
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54052, Methyl Parathion **Region 3**

Pajaro River Estuary

LOE ID:	94323
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54052, Methyl Parathion **Region 3**

Pajaro River Estuary

LOE ID:	94222
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54052, Methyl Parathion **Region 3**

Pajaro River Estuary

LOE ID:	94114
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54052, Methyl Parathion **Region 3**

Pajaro River Estuary

LOE ID:	94132
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54053**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Molinate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54053, Molinate **Region 3**

Pajaro River Estuary

LOE ID:	94136
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54053, Molinate **Region 3**

Pajaro River Estuary

LOE ID:	94137
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for molinate is 20 ug/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54053, Molinate **Region 3**

Pajaro River Estuary

LOE ID:	94133
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54054 Region 3

Pajaro River Estuary

Pollutant:	**Napropamide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54054, Napropamide Region 3

Pajaro River Estuary

LOE ID:	94138
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54054, Napropamide **Region 3**

Pajaro River Estuary

LOE ID:	94134
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54055 Region 3

Pajaro River Estuary

Pollutant:	**Pentachlorobenzene (PCNB)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the thirty samples exceed the evaluation guideline for drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the thirty samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54055, Pentachlorobenzene (PCNB) Region 3

Pajaro River Estuary

LOE ID:	94143
Pollutant:	Pentachlorobenzene (PCNB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PCNB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services archived Advisory Level for Pentachloronitrobenzene is 20 ug/L.
Guideline Reference:	CDPH Archived Advisory Levels for Drinking Water. Archived Advisory Levels are currently considered Notification Levels.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54056**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Two out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of nine sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of nine sediment samples exceeded the aquatic life evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54056, Permethrin, total **Region 3**

Pajaro River Estuary

LOE ID:	94120
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54056, Permethrin, total **Region 3**

Pajaro River Estuary

LOE ID:	94102
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54056, Permethrin, total **Region 3**

Pajaro River Estuary

LOE ID:	94200
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for PERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54056, Permethrin, total **Region 3**

Pajaro River Estuary

LOE ID:	94144
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for PERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54057 Region 3

Pajaro River Estuary

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54057, Phosmet Region 3

Pajaro River Estuary

LOE ID:	94145
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54057, Phosmet **Region 3**

Pajaro River Estuary

LOE ID:	94147
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54057, Phosmet **Region 3**

Pajaro River Estuary

LOE ID:	94201
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54058 Region 3

Pajaro River Estuary

Pollutant:	**Prometryn**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54058, Prometryn Region 3

Pajaro River Estuary

LOE ID:	94202
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54058, Prometryn **Region 3**

Pajaro River Estuary

LOE ID:	94149
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for prometryn is 28 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54058, Prometryn **Region 3**

Pajaro River Estuary

LOE ID:	94148
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54059** **Region 3**

Pajaro River Estuary

Pollutant:	**Propanil (DCPA mono- and di-acid degrad)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54059, Propanil (DCPA mono- and di-acid degrad) **Region 3**

Pajaro River Estuary

LOE ID:	94150
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54059, Propanil (DCPA mono- and di-acid degrad) **Region 3**

Pajaro River Estuary

LOE ID:	94203
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54060** **Region 3**

Pajaro River Estuary

Pollutant:	**Propiconazole**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54060, Propiconazole **Region 3**

Pajaro River Estuary

LOE ID:	94151
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54060, Propiconazole **Region 3**

Pajaro River Estuary

LOE ID:	94204
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54061** **Region 3**

Pajaro River Estuary

Pollutant:	**Resmethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54061, Resmethrin **Region 3**

Pajaro River Estuary

LOE ID:	94152
Pollutant:	Resmethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for RESMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Resmethrin is 210 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [

	Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54062 Region 3

Pajaro River Estuary

Pollutant:	**Simazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty samples exceed the evaluation guidelines for aquatic life protection and for drinking water uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54062, Simazine Region 3

Pajaro River Estuary

LOE ID:	94205
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for SIMAZINE.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54062, Simazine **Region 3**

Pajaro River Estuary

LOE ID:	94154
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for simazine is 0.004 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP

QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54062, Simazine **Region 3**

Pajaro River Estuary

LOE ID:	94153
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54063** **Region 3**

Pajaro River Estuary

Pollutant:	**Thiobencarb/Bolero**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Conclusion:	Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceed the evaluation guidelines for aquatic life protection and for drinking water uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54063, Thiobencarb/Bolero **Region 3**

Pajaro River Estuary

LOE ID:	94155
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:
QAPP Information: USGS QAPP
QAPP Information Reference(s): 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54063, Thiobencarb/Bolero **Region 3**

Pajaro River Estuary

LOE ID: 94156

Pollutant: Thiobencarb/Bolero
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 30
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for THIOBENCARB.
Data Reference: Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for thiobencarb is 0.07 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation: Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:
QAPP Information: USGS QAPP
QAPP Information Reference(s): 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54063, Thiobencarb/Bolero **Region 3**

Pajaro River Estuary

LOE ID: 94206

Pollutant: Thiobencarb/Bolero
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 30
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed USGS data for Pajaro River Estuary to determine

	beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54064**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Trifluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54064, Trifluralin — Region 3

Pajaro River Estuary

LOE ID:	94157
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54064, Trifluralin — Region 3

Pajaro River Estuary

LOE ID:	94207
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine

	beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54065**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Vinclozolin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54065, Vinclozolin **Region 3**

Pajaro River Estuary

LOE ID:	94158
Pollutant:	Vinclozolin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Vinclozolin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Vinclozolin is 180 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54111** **Region 3**

Pajaro River Estuary

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the 30 water samples exceed the evaluation guidelines for drinking water uses. One of the nine sediment samples exceed the evaluation guideline for aquatic life protection but the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of the 30 water samples exceed the evaluation guideline for drinking water uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 54111, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Pajaro River Estuary

LOE ID:	94032
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54111, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River Estuary

LOE ID:	94118
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54111, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River Estuary

LOE ID:	94140

Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 13 of 30 samples exceed the criterion for p p' DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDE(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54050**	**Region 3**
Pajaro River Estuary		

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 30 samples exceed the evaluation guideline for the protection of aquatic life uses but none of the 30 sample exceed the evaluation guideline for the protection of the Municipal and Domestic Life use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 30 samples exceed the evaluation guideline for the protection of aquatic life uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 54050, Malathion **Region 3**

Pajaro River Estuary

LOE ID:	94130
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54050, Malathion **Region 3**

Pajaro River Estuary

LOE ID:	94219
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54050, Malathion **Region 3**

Pajaro River Estuary

LOE ID:	94218
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	53806	Region 3
Pajaro River Estuary		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. A total of 9 out of 26 samples exceed the water quality objectives for protection of Cold Freshwater Habitat, Fish Spawning Habitat, and Estuarine Habitat. Zero of 26 samples exceed the water quality objective for protection of Warm Freshwater Habitat. These rates of exceedance are greater than the allowable frequency listed in Table 3.2 of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 9 out of 26 samples exceed the water quality objectives for protection of Cold Freshwater Habitat, Fish Spawning Habitat, and Estuarine Habitat. Each of these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53806, Oxygen, Dissolved **Region 3**

Pajaro River Estuary

LOE ID:	47895
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River Estuary to determine beneficial use support and results are as follows: 9 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [305PJE_L - Pajaro River Estuary Lower, 305PJE_U - Pajaro River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:50:33 AM-10/28/2009 9:27:46 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53806, Oxygen, Dissolved **Region 3**

Pajaro River Estuary

LOE ID:	47896
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	26
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River

	Estuary to determine beneficial use support and results are as follows: 9 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [305PJE_L - Pajaro River Estuary Lower, 305PJE_U - Pajaro River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:50:33 AM-10/28/2009 9:27:46 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53806, Oxygen, Dissolved **Region 3**

Pajaro River Estuary

LOE ID:	47897
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	26
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River Estuary to determine beneficial use support and results are as follows: 9 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [305PJE_L - Pajaro River Estuary Lower, 305PJE_U - Pajaro River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:50:33 AM-10/28/2009 9:27:46 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in

QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53806, Oxygen, Dissolved **Region 3**

Pajaro River Estuary

LOE ID:	47830
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [305PJE_L - Pajaro River Estuary Lower, 305PJE_U - Pajaro River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:50:33 AM-10/28/2009 9:27:46 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **53808** **Region 3**

Pajaro River Estuary

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Five of the 28 samples exceed the evaluation guideline (Moyle 1976) set to protect aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 28 samples exceed the evaluation guideline (Moyle 1976) set to protect aquatic life and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53808, Temperature, water **Region 3**

Pajaro River Estuary

LOE ID:	47847
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River Estuary to determine beneficial use support and results are as follows: 5 of 28 samples exceed the criterion for Water Temperature.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [305PJE_L - Pajaro River Estuary Lower, 305PJE_U - Pajaro River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:50:33 AM-10/28/2009 9:27:46 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	53809	Region 3
Pajaro River Estuary		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. One LOEs summarize sediment samples. Nine of the twenty-four sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. One LOEs summarize water samples. Seven of the thirty-three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 24 sediment samples and 7 of the 33 water samples exceed the water quality objective for aquatic life protection and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53809, Toxicity	**Region 3**
Pajaro River Estuary	

LOE ID:	56705
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	9
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-four samples were collected to evaluate sediment toxicity. Nine of the 24 samples exhibited significant toxicity to at least one test endpoint. The toxicity tests included two endpoints including survival and growth of Hyalella azteca. Although, samples may have up to two significant effects, each sample is only counted once. Samples were collected on three occasions from each of eight different stations. The following is a list of stations and dates where statistically significant toxic effects on Hyalella azteca was observed: at 305PJESD3 on 5/28/08, 10/29/08, and 10/28/09, at 305PJESD4 on 10/29/08, at 305PJESD5 on 10/29/08 and 10/28/09, at 305PJESD6 on 10/28/09, and at 305PJESD7 on 10/29/08 and 10/28/09.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at eight sites in the Pajaro River Estuary (305PJESD1, 305PJESD2, 305PJESD3, 305PJESD4, 305PJESD5, 305PJESD6, 305PJESD7, 305PJESD8.)
Temporal Representation:	The samples were collected in May, July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53809, Toxicity **Region 3**

Pajaro River Estuary

LOE ID:	56704
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Thirty-three samples were collected to evaluate water toxicity. Seven of the 33 samples exhibited significant toxicity. The toxicity tests included survival of Hyalella azteca and survival of Ceriodaphnia dubia. Statistically significant effects on Hyalella azteca were observed in the following seven samples: Lower Pajaro Estuary (305PJE_L) on 7/2/08,

	8/12/08, 9/10/08 and 10/8/08 and at Upper Pajaro Estuary (305PJE_U) on 2/17/09 and 10/14/09.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected from two stations, 305PJE_U - Pajaro River Estuary Upper and 305PJE_L - Pajaro River Estuary Lower.
Temporal Representation:	The samples ere collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

DECISION ID	**53807**	**Region 3**
Pajaro River Estuary		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. Eighteen of the 27 samples exceed the water quality objective for Cold and Warm Freshwater Habitats, and 21 of the 27 samples exceed the water quality objectives for Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighteen of the 27 samples exceed the water quality objective for Cold and Warm Freshwater Habitats, and 21 of the 27 samples exceed the water quality objectives for Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53807, pH **Region 3**

Pajaro River Estuary

LOE ID:	47834
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River Estuary to determine beneficial use support and results are as follows: 18 of 27 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [305PJE_L - Pajaro River Estuary Lower, 305PJE_U - Pajaro River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:50:33 AM-10/28/2009 9:27:46 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53807, pH **Region 3**

Pajaro River Estuary

LOE ID:	47833
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	21

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River Estuary to determine beneficial use support and results are as follows: 21 of 27 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [305PJE_L - Pajaro River Estuary Lower, 305PJE_U - Pajaro River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:50:33 AM-10/28/2009 9:27:46 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53807, pH **Region 3**

Pajaro River Estuary

LOE ID:	47832
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River Estuary to determine beneficial use support and results are as follows: 21 of 27 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [305PJE_L - Pajaro River Estuary Lower, 305PJE_U - Pajaro River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:50:33 AM-10/28/2009 9:27:46 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in

QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53807, pH **Region 3**

Pajaro River Estuary

LOE ID:	47831
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River Estuary to determine beneficial use support and results are as follows: 18 of 27 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [305PJE_L - Pajaro River Estuary Lower, 305PJE_U - Pajaro River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:50:33 AM-10/28/2009 9:27:46 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **40875** **Region 3**

Pajaro River Estuary

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Pajaro River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	998
Date TMDL Approved by USEPA:	11/12/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine sediment samples exceed the evaluation guideline for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Three of the 32 water samples exceed the evaluation guideline for protection of aquatic life uses. Zero of the 30 water samples exceed the evaluation guideline for the protection of Municipal and Domestic Supply uses (drinking water). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 32 water exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. The Pajaro River Watershed Chlorpyrifos and Diazinon TMDL has been approved by USEPA. 5.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 40875, Diazinon **Region 3**

Pajaro River Estuary

LOE ID:	18754
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 1 monitoring site [DHS015 - Pajaro River Lagoon located in the Watsonville Slough]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40875, Diazinon **Region 3**

Pajaro River Estuary

LOE ID:	18755
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 1 monitoring site [

	DHS015 - Pajaro River Lagoon located in the Watsonville Slough]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40875, Diazinon **Region 3**

Pajaro River Estuary

LOE ID:	94211
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40875, Diazinon **Region 3**

Pajaro River Estuary

LOE ID:	94125
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40875, Diazinon **Region 3**

Pajaro River Estuary

LOE ID:	94209
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 2 monitoring sites [Pajaro River Estuary Lower - 305PJE_L, Pajaro River Estuary Upper - 305PJE_U]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40875, Diazinon **Region 3**

Pajaro River Estuary

LOE ID:	94109
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]

Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 40875, Diazinon **Region 3**

Pajaro River Estuary

LOE ID:	94075
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River Estuary to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River Estuary was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 1 - 305PJESD1, Pajaro River Estuary-Sediment site 2 - 305PJESD2, Pajaro River Estuary-Sediment site 5 - 305PJESD5]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Old Salinas River**
Water Body ID: **CAR3091101020080611145518**
Water Body Type: **River & Stream**

DECISION ID **41633** **Region 3**
Old Salinas River

Pollutant: **Turbidity**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. A total of 516 of the 680 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 511 of the 680 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 516 of the 680 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 511 of the 680 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. These both exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**
Old Salinas River

LOE ID: 48778

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 13 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	13737
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Old Salinas River to determine beneficial use support and results are as follows: 17 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Potero Rd (Tide Gates)]
Temporal Representation:	Data was collected over the time period 8/29/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	13751
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Old Salinas River to determine beneficial use support and results are as follows: 17 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Potero Rd (Tide Gates)]
Temporal Representation:	Data was collected over the time period 8/29/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	12873
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	48779
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	13

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 13 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	12814
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 47 of 50 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon.

	Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	14609
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	12815
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 47 of 50 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	12874
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	15260
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	522
Number of Exceedances:	378
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 378 of 522 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	15259
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	522
Number of Exceedances:	378
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 378 of 522 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [

	309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	14610
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	51044
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 34 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	52963
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 14 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water

	Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	51102
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 31 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41633, Turbidity **Region 3**

Old Salinas River

LOE ID:	52971
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 12 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

DECISION ID **41704** **Region 3**

Old Salinas River

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Thirty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Two hundred and eleven of the 649 samples exceed the water quality objectives for Cold Freshwater Habitats, and 302 of the 649 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two hundred and eleven of the 649 samples exceed the water quality objectives for Cold Freshwater Habitats, and 302 of the 649 samples exceed the water quality objectives for Drinking Water and Recreation. These exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	52916
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 17 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas

	River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	52904
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 15 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	52956
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 15 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	52941
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 17 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	52948
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 17 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	50892
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	51101
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	51081
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 7 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	51066
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 7 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	51063
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 7 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	15117
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	505
Number of Exceedances:	176
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 176 of 505 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH — Region 3

Old Salinas River

LOE ID:	15099
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	505
Number of Exceedances:	176
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 176 of 505 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH — Region 3

Old Salinas River

LOE ID:	15100
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	505
Number of Exceedances:	249
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 249 of 505 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	15101
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	505
Number of Exceedances:	249
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 249 of 505 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	15102
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	505
Number of Exceedances:	249
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 249 of 505 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]

Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	14593
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	14594
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	14592
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	14608
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	14607
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	48777
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	48762
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	48776
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	48761
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	48760
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	10739
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	10740
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	10738
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling

	(DO) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	10722
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 18 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	10741
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	10737
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	10721
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 10 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	11002
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 18 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	10986
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 18 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41704, pH **Region 3**

Old Salinas River

LOE ID:	10723
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	56
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 10 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41651**	**Region 3**
Old Salinas River		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Fifty-three of the 305 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the

Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-three of the 305 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	52925
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	51173
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	51083
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	52817
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 4 of 34 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	52824
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	34
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 4 of 34 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	52810
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Chlorophyll a.

Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	48722
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	48723
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	15239
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	99
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 19 of 99 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Potrero Road, North, 309OSRPRS - Potrero Road, South, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	15238
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	99
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 19 of 99 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Potrero Road, North, 309OSRPRS - Potrero Road, South, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	14624
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]

Temporal Representation:	Data was collected over the time period 3/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	14625
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 3/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	12853
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a — Region 3

Old Salinas River

LOE ID:	12854
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a — Region 3

Old Salinas River

LOE ID:	9578

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 12 of 26 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/29/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	9584
Pollutant:	Chlorophyll-a

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 10 of 61 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	9558
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 10 of 61 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41651, Chlorophyll-a **Region 3**

Old Salinas River

LOE ID:	9577
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	12

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 12 of 26 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/29/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41735**	**Region 3**
Old Salinas River		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the

Conclusion:

Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the thirty-one water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Zero of three samples did not exceed the USEPA drinking water health advisory. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. For the municipal and domestic supply beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twenty-four of the thirty-one samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	48725
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	48724
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	14054
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Old Salinas River to determine beneficial use support and results are as follows: 23 of 23 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [Potero Rd (Tide Gates), Monterey Dunes Colony Rd]

Temporal Representation:	Data was collected over the time period 7/1/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	15113
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309POT_DPR - Old Salinas River at Potrero]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	16250

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	13997
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	23

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Old Salinas River to determine beneficial use support and results are as follows: 23 of 23 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [Potero Rd (Tide Gates), Monterey Dunes Colony Rd]
Temporal Representation:	Data was collected over the time period 7/1/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	15166
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	15165
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	16251
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	15112
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309POT_DPR - Old Salinas River at Potrero]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41735, Chlorpyrifos **Region 3**

Old Salinas River

LOE ID:	55665

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	41682	Region 3
Old Salinas River		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the thirty-two samples exceed the evaluation guidelines (Siepmann and Finlayson, 2000) and (Finlayson, 2004) set to protect for aquatic life beneficial uses. Zero of three samples exceeded the USEPA drinking water health advisory. For the municipal beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table

3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Thirteen of the thirty-two samples exceed the evaluation guidelines (Siepmann and Finlayson, 2000) and (Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41682, Diazinon **Region 3**

Old Salinas River

LOE ID:	55705
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41682, Diazinon **Region 3**

Old Salinas River

LOE ID:	16673
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41682, Diazinon — Region 3

Old Salinas River

LOE ID:	48741
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41682, Diazinon — Region 3

Old Salinas River

LOE ID:	13637
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	11

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Old Salinas River to determine beneficial use support and results are as follows: 11 of 23 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [Potero Rd (Tide Gates), Monterey Dunes Colony Rd]
Temporal Representation:	Data was collected over the time period 7/1/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41682, Diazinon **Region 3**

Old Salinas River

LOE ID:	13636
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Old Salinas River to determine beneficial use support and results are as follows: 11 of 23 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [Potero Rd (Tide Gates), Monterey Dunes Colony Rd]
Temporal Representation:	Data was collected over the time period 7/1/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41682, Diazinon **Region 3**

Old Salinas River

LOE ID:	14272
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41682, Diazinon **Region 3**

Old Salinas River

LOE ID:	15167
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41682, Diazinon **Region 3**

Old Salinas River

LOE ID:	15151
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309POT_DPR - Old Salinas River at Potrero]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41682, Diazinon **Region 3**

Old Salinas River

LOE ID:	15150
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309POT_DPR - Old Salinas River at Potrero]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41682, Diazinon **Region 3**

Old Salinas River

LOE ID:	16674
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41682, Diazinon **Region 3**

Old Salinas River

LOE ID:	48742
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	34163	Region 3
Old Salinas River		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Domestic Pet Waste | Illegal dumping | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-eight of 66 samples exceed the evaluation set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 25 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-eight of 66 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34163, Escherichia coli (E. coli) **Region 3**

Old Salinas River

LOE ID:	10757
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 15 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/11/2005-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34163, Escherichia coli (E. coli) **Region 3**

Old Salinas River

LOE ID:	10758
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/11/2005-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34163, Escherichia coli (E. coli) **Region 3**

Old Salinas River

LOE ID:	51065
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 13 of 41 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41362** **Region 3**

Old Salinas River

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Fifty-nine of 113 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 15 of 113 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-nine of 113 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA on 01/31/2012. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41362, Fecal Coliform **Region 3**

Old Salinas River

LOE ID:	51080
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41362, Fecal Coliform **Region 3**

Old Salinas River

LOE ID:	51064
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to

	determine beneficial use support and results are as follows: 17 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41362, Fecal Coliform **Region 3**

Old Salinas River

LOE ID:	10719
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	37
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 37 of 56 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41362, Fecal Coliform **Region 3**

Old Salinas River

LOE ID:	10720
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 12 of 56 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41362, Fecal Coliform **Region 3**

Old Salinas River

LOE ID:	10704
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 4/26/1999-2/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41362, Fecal Coliform **Region 3**

Old Salinas River

LOE ID:	10703
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16

Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 4/26/1999-2/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42984**	**Region 3**
Old Salinas River		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Four hundred and eighty-five of the 751 nitrate samples and 62 of the 74 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Seven hundred fifteen (715) of the 715 nitrate samples and all 60 nitrate/nitrite samples exceed the evaluation guideline

(Central Coast Region NNE Technical Report, 2010) for the Cold and Warm Freshwater Habitat beneficial uses. In addition, the following supporting evidence of eutrophication is provided:

1) Dissolved oxygen for this water body ranged from 1.83 to 31.03 mg/L, often exceeding (falling below) the Cold and Warm Freshwater Habitat water quality objectives of 7.0 and 5.0 mg/L (respectively). In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Floating algal mats ranged up to 90 % cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration averaged 25.5 ug/L and peaked at 392.70 ug/L, frequently exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 5.18 mg/L to 5.29 mg/L. This greatly exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 119 g/m2 ash-free dry weight (AFDW) to 124 g/m2 AFDW. This greatly exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 296 mg/m2 to 310 mg/m2. This exceeds both the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four hundred and eighty-five of the 751 nitrate samples and 62 of the 74 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. All 715 nitrate samples and all 60 nitrate/nitrite samples exceed the evaluation guideline for the Cold and Warm Freshwater Habitat beneficial uses
and there is ample supporting evidence of eutrophication is available.
4. The Lower Salinas River Nutrient TMDL has been approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	27877
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	517
Number of Exceedances:	487
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: National Estuarine Research Reserve Monitoring Program (R3_ESNERR)
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Potrero Road, North, 309OSRPRS - Potrero Road, South, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	27876
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	517
Number of Exceedances:	487
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: National Estuarine Research Reserve Monitoring Program (R3_ESNERR)

Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Potrero Road, North, 309OSRPRS - Potrero Road, South, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	13782
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Old Salinas River to determine beneficial use support and results are as follows: 12 of 21 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [Potero Rd (Tide Gates), Monterey Dunes Colony Rd]
Temporal Representation:	Data was collected over the time period 11/12/2001-6/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	15284
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 11 of 14 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Potrero Road, North, 309OSRPRS - Potrero Road, South, 309OSRMDW - Monterey Dunes Way]

Temporal Representation:	Data was collected over the time period 1/10/2006-11/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	9583
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	55
Number of Exceedances:	43
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 43 of 55 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	9579

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 16 of 24 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/29/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	27870
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	16

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [Potero Rd (Tide Gates), Monterey Dunes Colony Rd]
Temporal Representation:	Data was collected over the time period 11/12/2001-6/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	27873
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Salinas (Salinas)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/29/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	27871
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [Potero Rd (Tide Gates), Monterey Dunes Colony Rd]
Temporal Representation:	Data was collected over the time period 11/12/2001-6/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	27872
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Salinas (Salinas)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]

Temporal Representation:	Data was collected over the time period 3/29/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	27874
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	55
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Coastal Confluences (CC)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate — Region 3

Old Salinas River

LOE ID:	15188
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	517
Number of Exceedances:	309
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 309 of 517 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Potrero Road, North, 309OSRPRS - Potrero Road, South, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate — Region 3

Old Salinas River

LOE ID:	27875
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	55
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Coastal Confluences (CC)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	50888
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to

	determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	51098
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	50889
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory

	Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	51062
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 35 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	51084

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	52880
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	19

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 19 of 19 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 3/5/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	51048
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 34 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	52893
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 16 of 19 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 3/5/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve

Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	52846
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 19 of 19 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 3/5/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	52838

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	93
Number of Exceedances:	71
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 71 of 93 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South , 309OSRMDW - Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	52844
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	93
Number of Exceedances:	93
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 93 of 93 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South , 309OSRMDW - Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan. Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009. Ver.1.3

Line of Evidence (LOE) for Decision ID 42984, Nitrate **Region 3**

Old Salinas River

LOE ID:	52834
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	93
Number of Exceedances:	93
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 93 of 93 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South , 309OSRMDW - Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

DECISION ID	**41466**	**Region 3**
Old Salinas River		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.2 of the Listing Policy. Under 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status. Thirty-two lines of evidence are available in the administrative record to assess this pollutant. One hundred and fifty-one of the 664 samples exceeded the water quality objectives for dissolved oxygen in Cold Freshwater Habitats. Fifty of the 664 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred and fifty-one of the 664 samples exceeded the water quality objectives for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	52887
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	52871
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	52861
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 5

	of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	52911
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	50891
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 29 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	50890
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41

Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 17 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	51100
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 29 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	51099
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 9 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	48743
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 9 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	48757
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	48758
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 9 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	48759
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 9 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12871
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/19/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12872
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/19/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12800
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 8 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/1/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12801
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 4 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/1/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12802
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 15 of 27 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/1/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12803
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 15 of 27 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/1/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	15287
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	486
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 19 of 486 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	15329
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	279
Number of Exceedances:	86
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 86 of 279 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRMDW - Monterey Dunes Way, 309OSRPRN - Potrero Road, North]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	14685
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	14686
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	15273
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	486
Number of Exceedances:	85
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 85 of 486 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]
Temporal Representation: Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID: 15342

Pollutant: Dissolved oxygen saturation
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 279
Number of Exceedances: 86

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 86 of 279 samples exceed the criterion for Oxygen, Saturation.
Data Reference: Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006
Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006
Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRMDW - Monterey Dunes Way, 309OSRPRN - Potrero Road, North]
Temporal Representation: Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved — Region 3

Old Salinas River

LOE ID:	12819
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 19 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved — Region 3

Old Salinas River

LOE ID:	12820
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57

Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 4 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	14590
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced

below 7.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]

Temporal Representation: Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID: 14591

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 11
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data
Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]

Temporal Representation: Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12799
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 33 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12813
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 33 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12855
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/19/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41466, Oxygen, Dissolved **Region 3**

Old Salinas River

LOE ID:	12856
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/19/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	44496	Region 3
Old Salinas River		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Thirty lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Six LOEs summarize sediment samples. Three sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, six total samples are available to assess toxic effects in sediment samples. Six of the six sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Twenty-two LOEs summarize water samples. Nine water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty total samples are available to assess toxic effects in water samples. Nine of the twenty water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 6 sediment samples and 9 of the 20 water samples resulted in a significant toxic effect to one or more test organisms for the water quality objective set for aquatic life protection. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by USEPA on October 7, 2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23962
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23703
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/11/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23970
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 9 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/21/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23952
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca sediment 10-day survival %. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23917
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old

	Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23969
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 9 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/21/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23951
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca sediment 10-day survival %. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23998
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23986
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23987
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23925
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]

Temporal Representation:	Data was collected over the time period 2/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23926
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23961
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23996
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23924
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23960
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 7/26/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23979
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring

	(R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23976
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Atherinops affinis Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/21/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23953
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 7/26/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23988
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23980
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23977
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Atherinops affinis Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/21/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23993
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]

Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23989
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23702
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/11/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	23997
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	79273

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Seven of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. For samples where the salinity is higher than the test organismÂ's tolerance, alternate test organisms are used including Hyalella azteca and Thalassiosira pseudonana. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The samples that exhibited toxicity are as follows: Samples collected on 1/27/09, 1/27/08, 2/22/08, 1/20/10 were toxic to Ceriodaphnia dubia survival, samples from 2/6/09 and 3/31/10 were toxic to Hyalella Azteca and the samples from 2/6/09, 9/30/09 were toxic to Thalassiosira pseudonana. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309OLD Old Salinas River at Molera Road.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	79274
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. All three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309OLD Old Salinas River at Molera Road.
Temporal Representation:	The samples were collected annualy from April 2007 to April 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	59008
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. All three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309OLD Old Salinas River at Molera Road.
Temporal Representation:	The samples were collected annualy from April 2007 to April 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44496, Toxicity **Region 3**

Old Salinas River

LOE ID:	55580
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Seven of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. For samples where the salinity is higher than the test organismÂ's tolerance, alternate test organisms are used including Hyalella azteca and Thalassiosira pseudonana. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The samples that exhibited toxicity are as follows: Samples collected on 1/27/09, 1/27/08, 2/22/08, 1/20/10 were toxic to Ceriodaphnia dubia survival, samples from 2/6/09 and 3/31/10 were toxic to Hyalella Azteca and the samples from 2/6/09, 9/30/09 were toxic to Thalassiosira pseudonana. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control

	sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309OLD Old Salinas River at Molera Road.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**41248**	**Region 3**
Old Salinas River		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eleven lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which three of the 100 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 715 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 100 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 715 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41248, Ammonia — Region 3

Old Salinas River

LOE ID:	52919
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	98
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 98 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South , 309OSRMDW - Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41248, Ammonia — Region 3

Old Salinas River

LOE ID:	51172
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41248, Ammonia **Region 3**

Old Salinas River

LOE ID:	51046
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41248, Ammonia **Region 3**

Old Salinas River

LOE ID:	51082
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41248, Ammonia **Region 3**

Old Salinas River

LOE ID:	9530
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/29/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41248, Ammonia **Region 3**

Old Salinas River

LOE ID:	15169
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	497
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 497 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRN - Potrero Road, North, 309OSRPRS - Potrero Road, South, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41248, Ammonia **Region 3**

Old Salinas River

LOE ID:	14573
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41248, Ammonia **Region 3**

Old Salinas River

LOE ID:	14574
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41248, Ammonia **Region 3**

Old Salinas River

LOE ID:	9582
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41248, Ammonia **Region 3**

Old Salinas River

LOE ID:	9581
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way].
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41248, Ammonia **Region 3**

Old Salinas River

LOE ID:	9580
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48724**	**Region 3**
Old Salinas River		

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The three water sample results are not used in the assessment because the result was reported a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified. Therefore, zero of the samples exceed the evaluation guideline for aquatic life uses (Fojut et al. 2012). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48724, Bifenthrin **Region 3**

Old Salinas River

LOE ID:	55653
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48724, Bifenthrin **Region 3**

Old Salinas River

LOE ID:	55654
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**48725**	**Region 3**
Old Salinas River		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The three water sample results are not used in the assessment because the result was reported a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified. Therefore, zero of the samples exceed the evaluation guideline for aquatic life uses (Fojut et al. 2012). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if

a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48725, Cyfluthrin **Region 3**

Old Salinas River

LOE ID:	55667
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48725, Cyfluthrin **Region 3**

Old Salinas River

LOE ID:	55666
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID **48726** **Region 3**

Old Salinas River

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The three water sample results are not used in the assessment because the result was reported a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified. Therefore, zero of the samples exceed the evaluation guideline for aquatic life uses (Fojut et al. 2012). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48726, Cyhalothrin, Lambda — Region 3

Old Salinas River

LOE ID:	55676
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48726, Cyhalothrin, Lambda **Region 3**

Old Salinas River

LOE ID:	55677
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

	average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**48727**	**Region 3**
Old Salinas River		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The three water sample results are not used in the assessment because the result was reported a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified. Therefore, zero of the samples exceed the evaluation guideline for aquatic life uses (Fojut et al. 2012). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48727, Cypermethrin	**Region 3**

Old Salinas River

LOE ID:	55678
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48727, Cypermethrin **Region 3**

Old Salinas River

LOE ID:	55689
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**48729**	**Region 3**
Old Salinas River		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48729, Demeton **Region 3**

Old Salinas River

LOE ID:	55692
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48729, Demeton **Region 3**

Old Salinas River

LOE ID:	55702
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48729, Demeton **Region 3**

Old Salinas River

LOE ID:	55691
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48729, Demeton **Region 3**

Old Salinas River

LOE ID:	55690
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 48733 Region 3

Old Salinas River

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined by USEPA, Office of Pesticide Programs) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48733, Dichlorvos Region 3

Old Salinas River

LOE ID:	55706
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48733, Dichlorvos **Region 3**

Old Salinas River

LOE ID:	55707
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48733, Dichlorvos **Region 3**

Old Salinas River

LOE ID:	55731
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48733, Dichlorvos **Region 3**

Old Salinas River

LOE ID:	55719
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48733, Dichlorvos **Region 3**

Old Salinas River

LOE ID:	55718
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48733, Dichlorvos **Region 3**

Old Salinas River

LOE ID:	55717
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48733, Dichlorvos **Region 3**

Old Salinas River

LOE ID:	55730
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48733, Dichlorvos **Region 3**

Old Salinas River

LOE ID:	55729
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.

Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48733, Dichlorvos **Region 3**

Old Salinas River

LOE ID:	79272
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48734** **Region 3**

Old Salinas River

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the evaluation guideline for aquatic life uses (median lethal concentration or LC50, USEPA, Office of Pesticide Programs Ecotoxicity Database) or the evaluation guideline for drinking water (California Department of Health Services notification level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48734, Dimethoate **Region 3**

Old Salinas River

LOE ID:	55576
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48734, Dimethoate **Region 3**

Old Salinas River

LOE ID:	55575
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48734, Dimethoate **Region 3**

Old Salinas River

LOE ID:	55732
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48734, Dimethoate **Region 3**

Old Salinas River

LOE ID:	55578
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48734, Dimethoate **Region 3**

Old Salinas River

LOE ID:	55590
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48734, Dimethoate — Region 3

Old Salinas River

LOE ID:	55589
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48734, Dimethoate — Region 3

Old Salinas River

LOE ID:	55588
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48734, Dimethoate **Region 3**

Old Salinas River

LOE ID:	55587
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43

	ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48734, Dimethoate **Region 3**

Old Salinas River

LOE ID:	55577
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	48738	Region 3
Old Salinas River		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the evaluation guideline for drinking water (USEPA IRIS reference dose as a drinking water level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48738, Disulfoton	**Region 3**
Old Salinas River	

LOE ID:	55599
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48738, Disulfoton **Region 3**

Old Salinas River

LOE ID:	55598
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48738, Disulfoton **Region 3**

Old Salinas River

LOE ID:	55597
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48730** **Region 3**

Old Salinas River

Pollutant:	**Dyfonate (Fonofos or Fonophos)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the

three samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined by USEPA, Office of Pesticide Programs). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48730, Dyfonate (Fonofos or Fonophos) **Region 3**

Old Salinas River

LOE ID:	55600
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and

	NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48730, Dyfonate (Fonofos or Fonophos) Region 3

Old Salinas River

LOE ID:	55605
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	48731	Region 3
Old Salinas River		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined by USEPA, Office of Pesticide Programs). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48731, Esfenvalerate/Fenvalerate	**Region 3**
Old Salinas River	

LOE ID:	55607
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use

	support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48731, Esfenvalerate/Fenvalerate **Region 3**

Old Salinas River

LOE ID:	55606
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 48739 Region 3

Old Salinas River

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined by USEPA, Office of Pesticide Programs). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48739, Ethoprop Region 3

Old Salinas River

LOE ID:	55608
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48739, Ethoprop **Region 3**

Old Salinas River

LOE ID:	55615
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48739, Ethoprop **Region 3**

Old Salinas River

LOE ID:	55619
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

	Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48739, Ethoprop **Region 3**

Old Salinas River

LOE ID:	55620
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at

http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48739, Ethoprop **Region 3**

Old Salinas River

LOE ID:	55616
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48739, Ethoprop **Region 3**

Old Salinas River

LOE ID:	55614

Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48740**	**Region 3**
Old Salinas River		

Pollutant:	**Fenamiphos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline for aquatic life uses (median lethal concentration (LC50), USEPA Office of Pesticide Programs Ecotoxicity database) or the evaluation guideline for drinking water (USEPA IRIS reference dose as a drinking water level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48740, Fenamiphos **Region 3**

Old Salinas River

LOE ID:	55629
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for fenamiphos is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at

http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48740, Fenamiphos **Region 3**

Old Salinas River

LOE ID:	55628
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48740, Fenamiphos **Region 3**

Old Salinas River

LOE ID:	55621
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**48735**	**Region 3**
Old Salinas River		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the evaluation guideline for aquatic life uses (Palumbo, A.J., et al., 2012) or the evaluation guideline for drinking water (USEPA drinking water life-time health advisory level). Note three samples are not included in the assessment because they were reported as "non detect" but the reporting limit is higher than the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the eight samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48735, Malathion **Region 3**

Old Salinas River

LOE ID:	55638
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48735, Malathion **Region 3**

Old Salinas River

LOE ID:	55645
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48735, Malathion **Region 3**

Old Salinas River

LOE ID:	55647
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48735, Malathion **Region 3**

Old Salinas River

LOE ID:	55646
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48735, Malathion **Region 3**

Old Salinas River

LOE ID:	55631
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48735, Malathion **Region 3**

Old Salinas River

LOE ID:	55630
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48735, Malathion **Region 3**

Old Salinas River

LOE ID:	55639
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.

Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48735, Malathion **Region 3**

Old Salinas River

LOE ID:	55636
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48735, Malathion **Region 3**

Old Salinas River

LOE ID:	55637
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48737** **Region 3**

Old Salinas River

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined in USEPA 1985) or the evaluation guideline for drinking water (USEPA IRIS reference dose as a drinking water level). This sample size is insufficient

to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48737, Methidathion **Region 3**

Old Salinas River

LOE ID:	55657
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of

Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48737, Methidathion **Region 3**

Old Salinas River

LOE ID:	55648
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48737, Methidathion **Region 3**

Old Salinas River

LOE ID:	55658

Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**48736**	**Region 3**
Old Salinas River		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the evaluation guideline for aquatic life uses (Menconi, M. and J.M. Harrington, 1992) or the evaluation guideline for drinking water (USEPA IRIS reference dose as a drinking water

level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the eight samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48736, Methyl Parathion **Region 3**

Old Salinas River

LOE ID:	55681
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]

Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48736, Methyl Parathion **Region 3**

Old Salinas River

LOE ID:	55668
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48736, Methyl Parathion **Region 3**

Old Salinas River

LOE ID:	55660

Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48736, Methyl Parathion **Region 3**

Old Salinas River

LOE ID:	55659
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48736, Methyl Parathion **Region 3**

Old Salinas River

LOE ID:	55669
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48736, Methyl Parathion **Region 3**

Old Salinas River

LOE ID:	55671
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48736, Methyl Parathion **Region 3**

Old Salinas River

LOE ID:	55680
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48736, Methyl Parathion **Region 3**

Old Salinas River

LOE ID:	55679
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48736, Methyl Parathion **Region 3**

Old Salinas River

LOE ID:	55670
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

QAPP Information Reference(s):	QA data are included in submission. All data are flagged as appropriate. Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48728** **Region 3**

Old Salinas River

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The three water sample results are not used in the assessment because the result was reported a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified. Therefore, zero of the samples exceed the evaluation guideline for aquatic life uses (Fojut et al. 2012). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48728, Permethrin, total **Region 3**

Old Salinas River

LOE ID:	55694
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48728, Permethrin, total **Region 3**

Old Salinas River

LOE ID:	55693
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support. Three samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**48732**	**Region 3**
Old Salinas River		

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the eight samples exceed the evaluation guideline for aquatic life uses (median lethal concentration or LC50, USEPA, Office of Pesticide Programs Ecotoxicity Database) or the evaluation guideline for drinking water (National Academy of Sciences health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48732, Phorate **Region 3**

Old Salinas River

LOE ID:	55721
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48732, Phorate **Region 3**

Old Salinas River

LOE ID:	55720
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48732, Phorate **Region 3**

Old Salinas River

LOE ID:	55734
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the

	no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Â Old Salinas River at Potrero Road - 309POT]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48732, Phorate **Region 3**

Old Salinas River

LOE ID:	55712
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48732, Phorate **Region 3**

Old Salinas River

LOE ID:	55724
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48732, Phorate **Region 3**

Old Salinas River

LOE ID:	55733
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48732, Phorate **Region 3**

Old Salinas River

LOE ID:	55722
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48732, Phorate **Region 3**

Old Salinas River

LOE ID:	55723
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48732, Phorate **Region 3**

Old Salinas River

LOE ID:	55711
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [Old Salinas River - 309OLD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**41701**	**Region 3**
Old Salinas River		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One hundred and one of the 715 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred and one of the 715 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41701, Temperature, water **Region 3**

Old Salinas River

LOE ID:	15227
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	535
Number of Exceedances:	83
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Old Salinas River to determine beneficial use support and results are as follows: 83 of 535 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRPRS - Potrero Road, South, 309OSRPRN - Potrero Road, North, 309OSRMDW - Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41701, Temperature, water **Region 3**

Old Salinas River

LOE ID:	14623
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41701, Temperature, water **Region 3**

Old Salinas River

LOE ID:	12875
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/19/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41701, Temperature, water **Region 3**

Old Salinas River

LOE ID:	48780
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 2/14/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41701, Temperature, water **Region 3**

Old Salinas River

LOE ID:	12821
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Old Salinas River to determine beneficial use support and results are as follows: 8 of 57 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41701, Temperature, water **Region 3**

Old Salinas River

LOE ID:	12818
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Old Salinas River to determine beneficial use support and results are as follows: 2 of 28 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 2 monitoring sites [309OLD-Old Salinas River at Monterey Dunes Way , 309POT-Old Salinas River at Potrero Road]
Temporal Representation:	Data was collected over the time period 3/1/1999-3/7/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41701, Temperature, water **Region 3**

Old Salinas River

LOE ID:	52933
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 3 of 20 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 3 monitoring sites [309OSRMDW - Old Salinas River at Monterey Dunes Way , 309OSRPRN - Old Salinas River at Potrero Road, North , 309OSRPRS - Old Salinas River at Potrero Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41701, Temperature, water **Region 3**

Old Salinas River

LOE ID:	51045
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Salinas River to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41201** **Region 3**

Old Salinas River

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41201, Anthracene **Region 3**

Old Salinas River

LOE ID:	15603
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41201, Anthracene **Region 3**

Old Salinas River

LOE ID:	15604
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41263**	**Region 3**
Old Salinas River		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 41263, Arsenic **Region 3**

Old Salinas River

LOE ID:	15672
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41263, Arsenic **Region 3**

Old Salinas River

LOE ID:	15673
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41277**	**Region 3**
Old Salinas River		

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41277, Benzo(a)anthracene **Region 3**

Old Salinas River

LOE ID:	15726
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41277, Benzo(a)anthracene **Region 3**

Old Salinas River

LOE ID:	15725
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40533** **Region 3**

Old Salinas River

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

	2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40533, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Old Salinas River

LOE ID:	15357
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40533, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Old Salinas River

LOE ID:	15356
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41013	Region 3
Old Salinas River		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single

sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41013, Cadmium **Region 3**

Old Salinas River

LOE ID:	15458
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41013, Cadmium **Region 3**

Old Salinas River

LOE ID:	15457
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41058** **Region 3**

Old Salinas River

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

Conclusion:	the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41058, Chromium **Region 3**

Old Salinas River

LOE ID:	15899
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41058, Chromium **Region 3**

Old Salinas River

LOE ID:	15912
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41656** **Region 3**

Old Salinas River

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41656, Chrysene (C1-C4) **Region 3**

Old Salinas River

LOE ID:	15996
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41656, Chrysene (C1-C4) **Region 3**

Old Salinas River

LOE ID:	15997
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41658** **Region 3**

Old Salinas River

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41658, Copper **Region 3**

Old Salinas River

LOE ID:	16067
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41658, Copper **Region 3**

Old Salinas River

LOE ID:	16080
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41728	Region 3
Old Salinas River		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41728, Dieldrin	**Region 3**
Old Salinas River	

LOE ID:	16743
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41728, Dieldrin **Region 3**

Old Salinas River

LOE ID:	16744
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41729 Region 3

Old Salinas River

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41729, Endrin Region 3

Old Salinas River

LOE ID:	16605
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0

	of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41729, Endrin **Region 3**

Old Salinas River

LOE ID:	16606
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41674 Region 3

Old Salinas River

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41674, Fluoranthene Region 3

Old Salinas River

LOE ID:	16440
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41674, Fluoranthene **Region 3**

Old Salinas River

LOE ID:	16453
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41676 Region 3

Old Salinas River

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41676, Fluorene Region 3

Old Salinas River

LOE ID:	16507
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41676, Fluorene **Region 3**

Old Salinas River

LOE ID:	16508
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41683 Region 3

Old Salinas River

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41683, Lead Region 3

Old Salinas River

LOE ID:	17150

Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41683, Lead **Region 3**

Old Salinas River

LOE ID:	17151
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41688**	**Region 3**
Old Salinas River		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41688, Mercury — Region 3

Old Salinas River

LOE ID:	17236
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41688, Mercury — Region 3

Old Salinas River

LOE ID:	17235
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41689**	**Region 3**
Old Salinas River		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41689, Naphthalene **Region 3**

Old Salinas River

LOE ID:	17302
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41689, Naphthalene **Region 3**

Old Salinas River

LOE ID:	17289
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41348**	**Region 3**
Old Salinas River		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence

of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41348, Nickel **Region 3**

Old Salinas River

LOE ID:	17125
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41348, Nickel **Region 3**

Old Salinas River

LOE ID:	17124

Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41359** **Region 3**

Old Salinas River

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41359, Phenanthrene **Region 3**

Old Salinas River

LOE ID:	16957
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41359, Phenanthrene **Region 3**

Old Salinas River

LOE ID:	16970
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41361** **Region 3**

Old Salinas River

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41361, Pyrene **Region 3**

Old Salinas River

LOE ID:	17088
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41361, Pyrene **Region 3**

Old Salinas River

LOE ID:	17087
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41337** **Region 3**

Old Salinas River

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41337, Zinc **Region 3**

Old Salinas River

LOE ID:	17717
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41337, Zinc **Region 3**

Old Salinas River

LOE ID:	17718
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Old Salinas River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Old Salinas River was collected at 1 monitoring site [309OLD-Old Salinas River at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **North Main Street Channel**
Water Body ID: **CAR3121003020080620111045**
Water Body Type: **River & Stream**

DECISION ID	41171	Region 3
North Main Street Channel		

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy.

One line of evidence is available in the administrative record to assess this pollutant. Two of the three samples exceed the water quality objective for drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 3 samples exceeded the Municipal and Domestic Supply water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on March 8, 2016.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41171, Nitrate **Region 3**

North Main Street Channel

LOE ID:	14811
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Santa Maria Stormwater Monitoring (R3_SM_Storm) data for North Main Street Channel to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for North Main Street Channel was collected at 1 monitoring site [N-MainStreetChannel - north side of main street]
Temporal Representation:	Data was collected over the time period 12/2/2005-4/3/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

DECISION ID **41340** **Region 3**

North Main Street Channel

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle but the pollutant name has changed to Ammonia. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. One of the 3 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 3 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41340, Ammonia **Region 3**

North Main Street Channel

LOE ID:	15040
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Santa Maria Stormwater Monitoring (R3_SM_Storm) data for North Main Street Channel to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for North Main Street Channel was collected at 1 monitoring site [N-MainStreetChannel - north side of main street]
Temporal Representation:	Data was collected over the time period 12/2/2005-4/3/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

DECISION ID 41341 Region 3

North Main Street Channel

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 3 samples exceed the Water Contact Recreation water quality objective but none of the 3 samples exceed the Non-Contact Recreation water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 3 samples exceed the Water Contact Recreation water quality objective but none of the 3 samples exceed the Non-Contact Recreation water quality objective. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41341, Fecal Coliform Region 3

North Main Street Channel

LOE ID:	15006
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Santa Maria Stormwater Monitoring (R3_SM_Storm) data for North Main Street Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for North Main Street Channel was collected at 1 monitoring site [N-MainStreetChannel - north side of main street]
Temporal Representation:	Data was collected over the time period 12/2/2005-4/3/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41341, Fecal Coliform **Region 3**

North Main Street Channel

LOE ID:	15021
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Santa Maria Stormwater Monitoring (R3_SM_Storm) data for North Main Street Channel to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for North Main Street Channel was collected at 1 monitoring site [N-MainStreetChannel - north side of main street]
Temporal Representation:	Data was collected over the time period 12/2/2005-4/3/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Nobel Gulch Creek**
Water Body ID: **CAR3041301420080603122127**
Water Body Type: **River & Stream**

DECISION ID **41318** **Region 3**
Nobel Gulch Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Collection System Failure | Domestic Pet Waste | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name: Soquel Lagoon Pathogens
TMDL Project Code: 593
Date TMDL Approved by USEPA: 11/17/2010
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of 25 samples exceed the evaluation set to protect for water contact recreation (i.e. swimming, wading etc.) and 8 of 25 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-two of 25 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 8 of 25 samples exceed the water quality objective for non-contact recreation. Both of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Soquel Lagoon Pathogen TMDL has been approved by the USEPA on 11/17/2010.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41318, Escherichia coli (E. coli) **Region 3**

Nobel Gulch Creek

LOE ID:	19823
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 8 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 1/6/2003-12/28/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41318, Escherichia coli (E. coli) **Region 3**

Nobel Gulch Creek

LOE ID:	19822
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	22
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 22 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 1/6/2003-12/28/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41181**	**Region 3**
Nobel Gulch Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 8 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41181, Ammonia **Region 3**

Nobel Gulch Creek

LOE ID:	19744
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 6/11/1998-12/27/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **41331** **Region 3**

Nobel Gulch Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 1 sample exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 1 sample exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41331, Fecal Coliform **Region 3**

Nobel Gulch Creek

LOE ID:	18807
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 1 monitoring site [304NOS_SCC - NOBEL G at SOQUEL C]
Temporal Representation:	Data was collected on a single day 5/15/1990.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41331, Fecal Coliform **Region 3**

Nobel Gulch Creek

LOE ID:	18806
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 1 monitoring site [304NOS_SCC - NOBEL G at SOQUEL C]
Temporal Representation:	Data was collected on a single day 5/15/1990.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the

dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	41192	Region 3
Nobel Gulch Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 9 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41192, Nitrate	**Region 3**
Nobel Gulch Creek	

LOE ID:	19710
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996

	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 6/11/1998-10/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41332**	**Region 3**
Nobel Gulch Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 60 samples exceed the Cold Freshwater Habitat water quality objective but none of the 60 samples exceed the Warm Freshwater Habitat water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 60 samples exceed the Cold Freshwater Habitat water quality objective but none of the 60 samples exceed the Warm Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41332, Oxygen, Dissolved **Region 3**

Nobel Gulch Creek

LOE ID:	19768
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 3 of 60 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41332, Oxygen, Dissolved **Region 3**

Nobel Gulch Creek

LOE ID:	19769
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41280**	**Region 3**
Nobel Gulch Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 61 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 61 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold

	Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41280, Temperature, water **Region 3**

Nobel Gulch Creek

LOE ID:	19915
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 5/15/1990-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **41810** **Region 3**

Nobel Gulch Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. However, staff are unaware of any documentation of steelhead in Nobel Gulch. Therefore this Evaluation Guideline is not appropriate for this waterbody. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. This Evaluation Guideline is not appropriate for this waterbody. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41810, Turbidity **Region 3**

Nobel Gulch Creek

LOE ID:	19357
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 23 of 59 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 12/8/2004-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41810, Turbidity **Region 3**

Nobel Gulch Creek

LOE ID:	19383
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 23 of 59 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 12/8/2004-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to

protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	41637	Region 3
Nobel Gulch Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Four of the 62 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and 1 of 62 samples exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 62 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and 1 of 62 samples exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41637, pH	Region 3
Nobel Gulch Creek	

LOE ID:	19711
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 4 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41637, pH **Region 3**

Nobel Gulch Creek

LOE ID:	19754
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 1 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [

	304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41637, pH **Region 3**

Nobel Gulch Creek

LOE ID:	19753
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 4 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41637, pH **Region 3**

Nobel Gulch Creek

LOE ID:	19756
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 1 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41637, pH **Region 3**

Nobel Gulch Creek

LOE ID:	19755
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Nobel Gulch Creek to determine beneficial use support and results are as follows: 1 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nobel Gulch Creek was collected at 2 monitoring sites [304NOS_SCC - NOBEL G at SOQUEL C, 304NOT_SCC - NOBEL G at TUNNEL at BAY]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Nacimiento River (below Nacimiento Reservoir)**
Water Body ID: **CAR309811752008061614013 4**
Water Body Type: **River & Stream**

DECISION ID **41001** **Region 3**

Nacimiento River (below Nacimiento Reservoir)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 16 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 27 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 27 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41001, Ammonia **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50708
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41001, Ammonia **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51055
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento

	River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41001, Ammonia **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50678
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41001, Ammonia **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	9553
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41001, Ammonia **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	9554

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41001, Ammonia **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	9555
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento

	River(below res) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40957 Region 3

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40957, Boron **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	9556
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 5/13/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40957, Boron **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50660

Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53546 Region 3

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table

3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53546, Chloride **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51037
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41126	Region 3

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41126, Chlorophyll-a **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50690
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41126, Chlorophyll-a **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51056
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41126, Chlorophyll-a **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	9529
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural

	Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41126, Chlorophyll-a **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	9528
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41045**	**Region 3**
Nacimiento River (below Nacimiento Reservoir)		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for E. coli is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. One of 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 10 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 10 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41045, Escherichia coli (E. coli) Region 3

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10701
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 3/2/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41045, Escherichia coli (E. coli) Region 3

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10702
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 3/2/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41045, Escherichia coli (E. coli) Region 3

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50722
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41063 Region 3

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of 28 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 28 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 28 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 28 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41063, Fecal Coliform Region 3

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51035
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41063, Fecal Coliform **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50721
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200

	MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41063, Fecal Coliform **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10939
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 2 of 26 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41063, Fecal Coliform **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10940
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41124 **Region 3**

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 2 nitrate samples exceed the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 2 nitrate/nitrite samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 2 nitrate samples exceed the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 2 nitrate/nitrite samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	9527
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	9557
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51057
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50719
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50691
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50718
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50692
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50675
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51071
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41124, Nitrate **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50662
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento

	River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48553 Region 3

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48553, Nitrogen, Nitrite **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50676
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40985 **Region 3**

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. One of the 33 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, zero of the 33 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 33 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, zero of the 33 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that though this water body is impaired for sediment toxicity, these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50704
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51072
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51073
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50693
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	12764
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	13020
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	13019
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	12767
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	12766
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	12765
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	13034
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 3 of 26 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40985, Oxygen, Dissolved **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	13035
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 3 of 26 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48555 Region 3

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the site specific water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48555, Sodium **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51039
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Sodium.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41156 **Region 3**

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 21 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41156, Specific Conductivity **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50661
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]

Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41156, Specific Conductivity **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	13867
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [Highwater Bridge]
Temporal Representation:	Data was collected over the time period 6/7/2000-9/8/2000.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41156, Specific Conductivity **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	12786
Pollutant:	Electrical Conductivity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 8/16/2006-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41156, Specific Conductivity **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10941
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41064**	**Region 3**
Nacimiento River (below Nacimiento Reservoir)		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 33 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 33 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41064, Temperature, water **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	13037
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41064, Temperature, water **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	12768
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41064, Temperature, water **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50707
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48557 Region 3

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the site specific water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48557, Total Dissolved Solids Region 3

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51038
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 200 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40976 Region 3

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and zero of the 13 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported

and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40976, Turbidity **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50706
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40976, Turbidity **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51075
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40976, Turbidity **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	12784
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 4/19/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40976, Turbidity **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	12785
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 4/19/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42057 Region 3

Nacimiento River (below Nacimiento Reservoir)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 18 samples exceed the water quality objectives for Agriculture, Cold and Warm Freshwater Habitats and three of the 18 samples exceed the water quality objectives for Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 18 samples exceed the water quality objectives for Agriculture, Cold and Warm Freshwater Habitats and three of the 18 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42057, pH — Region 3

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10980
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH — Region 3

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10981
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10700
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]

Temporal Representation: Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID: 10957

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 15

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Salinas Toxicity data
Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]

Temporal Representation: Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10942
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10961
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10960
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10959
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10958
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10979
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10978
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not

	be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	10977
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River at Highway 101]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42057, pH — Region 3

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51074
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42057, pH — Region 3

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50720
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50677
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51036
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	51034
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42057, pH **Region 3**

Nacimiento River (below Nacimiento Reservoir)

LOE ID:	50705
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nacimiento River(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nacimiento River(below res) was collected at 1 monitoring site [309NAC-Nacimiento River above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Moore Creek**
Water Body ID: **CAR3041103120080602125209**
Water Body Type: **River & Stream**

DECISION ID **42237** **Region 3**
Moore Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 20 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42237, Ammonia **Region 3**
Moore Creek

LOE ID: 13953

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 2 monitoring sites [304MNB_CCL - Moore Creek at Natural Bridges, 304MRC_CCL - Moore Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID	40993	Region 3
Moore Creek		

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Five of 39 samples exceeded the water quality objective for Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 39 samples exceeded the water quality objective for Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40993, Enterococcus **Region 3**

Moore Creek

LOE ID:	14174
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 2 monitoring sites [304MNB_CCL - Moore Creek at Natural Bridges, 304MRC_CCL - Moore Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40993, Enterococcus **Region 3**

Moore Creek

LOE ID:	14173
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Moore Creek to determine beneficial use support and results are as follows: 5 of 39 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 2 monitoring sites [304MNB_CCL - Moore Creek at Natural Bridges, 304MRC_CCL - Moore Creek at HWY 1]
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID **41030** **Region 3**

Moore Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the 56 samples exceed the water quality objectives for Municipal & Domestic Supply or Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 56 samples exceed the water quality objectives for Municipal & Domestic Supply or Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41030, Nitrate — Region 3

Moore Creek

LOE ID:	19632
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 2/23/1999-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41030, Nitrate — Region 3

Moore Creek

LOE ID:	19631
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 2/23/1999-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41030, Nitrate **Region 3**

Moore Creek

LOE ID:	18361
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41030, Nitrate **Region 3**

Moore Creek

LOE ID:	13954
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 2 monitoring sites [304MNB_CCL - Moore Creek at Natural Bridges, 304MRC_CCL - Moore Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41030, Nitrate **Region 3**

Moore Creek

LOE ID:	18362
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41030, Nitrate **Region 3**

Moore Creek

LOE ID:	13955
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 2 monitoring sites [304MNB_CCL - Moore Creek at Natural Bridges, 304MRC_CCL - Moore Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID	**41096**	**Region 3**
Moore Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 21 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 21 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold

Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41096, Temperature, water **Region 3**

Moore Creek

LOE ID:	18728
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 2 of 17 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41096, Temperature, water **Region 3**

Moore Creek

LOE ID:	19599
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**40978**	**Region 3**
Moore Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life

	beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40978, Turbidity **Region 3**

Moore Creek

LOE ID:	19353
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40978, Turbidity — Region 3

Moore Creek

LOE ID:	19328
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 42119 — Region 3

Moore Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of 57 samples exceeded the water quality objective for Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42119, Escherichia coli (E. coli) **Region 3**

Moore Creek

LOE ID:	19845
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 8/3/2000-8/11/2003.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42119, Escherichia coli (E. coli) **Region 3**

Moore Creek

LOE ID:	19846
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 8/3/2000-8/11/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42119, Escherichia coli (E. coli) **Region 3**

Moore Creek

LOE ID:	14047
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Moore Creek to determine beneficial use support and results are as follows: 7 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 2 monitoring sites [304MNB_CCL - Moore Creek at Natural Bridges, 304MRC_CCL - Moore Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42119, Escherichia coli (E. coli) Region 3

Moore Creek

LOE ID:	18552
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-

	MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42119, Escherichia coli (E. coli) **Region 3**

Moore Creek

LOE ID:	14048
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 2 monitoring sites [304MNB_CCL - Moore Creek at Natural Bridges, 304MRC_CCL - Moore Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42119, Escherichia coli (E. coli) **Region 3**

Moore Creek

LOE ID:	18553
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**42114**	**Region 3**
Moore Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Six lines of evidence are available in the administrative record to assess these pollutants. Six lines of evidence are available in the administrative record to assess this pollutant. Eight of the 19 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and three of the 19 samples exceed the dissolved oxygen water quality objective for Warm Freshwater Habitat. This

sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 19 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42114, Oxygen, Dissolved **Region 3**

Moore Creek

LOE ID:	19749
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42114, Oxygen, Dissolved **Region 3**

Moore Creek

LOE ID:	19750
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42114, Oxygen, Dissolved **Region 3**

Moore Creek

LOE ID:	18122

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42114, Oxygen, Dissolved **Region 3**

Moore Creek

LOE ID:	18024
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.)]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42114, Oxygen, Dissolved **Region 3**

Moore Creek

LOE ID:	18121
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-26 - Moore Creek at mouth]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42114, Oxygen, Dissolved **Region 3**

Moore Creek

LOE ID:	18023
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.)]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41132** **Region 3**

Moore Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Six of the 19 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 19 samples exceed the Agricultural Supply water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41132, Specific Conductivity **Region 3**

Moore Creek

LOE ID:	17666
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 5 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41132, Specific Conductivity **Region 3**

Moore Creek

LOE ID:	19784
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41132, Specific Conductivity — Region 3

Moore Creek

LOE ID:	17578
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 3 monitoring sites [304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-26 - Moore Creek at mouth, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.)]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41061 — Region 3

Moore Creek

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Twelve lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 21 samples exceed the Cold and Warm Freshwater Habitat water quality objectives. In addition, 6 of the 21 samples exceed the numeric objectives for Municipal & Domestic Supply, Agricultural Supply, Non-Contact Recreation and Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	19692
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	19675
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	19676
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	19674
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	19673
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to

	protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	19691
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Moore Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 1 monitoring site [304MOO_SCC - MOORE C at MOUTH at NAT B]
Temporal Representation:	Data was collected over the time period 12/11/2001-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	18876
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	17
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 5 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	18875
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 3 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	18896
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 5 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	18895
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	17
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 3 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	18894
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17

Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 3 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41061, pH **Region 3**

Moore Creek

LOE ID:	18893
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moore Creek to determine beneficial use support and results are as follows: 3 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moore Creek was collected at 6 monitoring sites [304-MOORE-22 - UCSC grounds; Just below Arboritum bldg. Closest to Empire grade Road, 304-MOORE-25 - UCSC grounds, 304-MOORE-24 - Moore Creek above Antonelli Pond, 304-MOORE-21 - Moore Creek At the outflo of Antonelli Pond, 304-MOORE-23 - Moore Creek at Meder Street Crossing (518 Meder St.), 304-MOORE-26 - Moore Creek at mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Montecito Creek**
Water Body ID: **CAR3153301020080612170226**
Water Body Type: **River & Stream**

DECISION ID	42142	Region 3
Montecito Creek		

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 10 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 11 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 10 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 11 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.
These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42142, Ammonia — Region 3

Montecito Creek

LOE ID:	10668
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42142, Ammonia — Region 3

Montecito Creek

LOE ID:	10667
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42142, Ammonia **Region 3**

Montecito Creek

LOE ID:	10666
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42142, Ammonia **Region 3**

Montecito Creek

LOE ID:	50617
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42142, Ammonia — Region 3

Montecito Creek

LOE ID:	50626
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42142, Ammonia — Region 3

Montecito Creek

LOE ID:	50636
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**48499**	**Region 3**
Montecito Creek		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample had a SoCal IBI score below 40 which indicates poor water quality for this area. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough

information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 48499, Benthic Community Effects **Region 3**

Montecito Creek

LOE ID:	55304
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was 39 or lower and therefore is below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315MTCxxx-Montecito Creek at Jamison Lane
Temporal Representation:	Surveys done on April 10, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

DECISION ID **42077** **Region 3**

Montecito Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the ten

samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the ten samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42077, Chlorophyll-a **Region 3**

Montecito Creek

LOE ID:	50618
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42077, Chlorophyll-a **Region 3**

Montecito Creek

LOE ID:	50637
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42077, Chlorophyll-a **Region 3**

Montecito Creek

LOE ID:	10683
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42077, Chlorophyll-a **Region 3**

Montecito Creek

LOE ID:	10669
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	47334	Region 3
Montecito Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for E. coli is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. One of 4 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47334, Escherichia coli (E. coli)	**Region 3**
Montecito Creek	

LOE ID:	50632
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Escherichia coli.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42147**	**Region 3**
Montecito Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for Fecal Coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Two of 11 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 11 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 11 samples exceed the evaluation guideline contact recreation (i.e. swimming) and 0 of 11 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42147, Fecal Coliform **Region 3**

Montecito Creek

LOE ID:	50634
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42147, Fecal Coliform **Region 3**

Montecito Creek

LOE ID:	50631
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42147, Fecal Coliform **Region 3**

Montecito Creek

LOE ID:	12224
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42147, Fecal Coliform **Region 3**

Montecito Creek

LOE ID:	12209
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42148	Region 3
Montecito Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 nitrate samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Two of 4 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 4 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Two of the 4 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. The following is a summary of the supporting evidence: 1) Dissolved oxygen for this site on the water body ranged from 9.69 mg/L to 12.74 mg/L, never exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L or the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Floating mats never exceeded the screening threshold of 50% (R3 NNE Technical Report, 2010). 3) The maximum water column chlorophyll a concentration was 16.5 ug/L, exceeding the screening threshold of 15 ug/L once (R3 NNE Technical Report, 2010). 4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 1.09 mg/L. This does not exceed the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). 5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 25 g/m2 ash-free dry weight (AFDW). This does not exceed the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 (Creager, et al., 2006). 6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentration of 64 mg/m2. This does not exceed the Cold Freshwater Habitat screening threshold of 150 mg/m2 (Creager, et al., 2006). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 4 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat.Two of the 4 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy, however, there is insufficient supporting evidence of impairment to support a nitrate listing for Cold and Warm Freshwater Habitat.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42148, Nitrate **Region 3**

Montecito Creek

LOE ID:	10684
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42148, Nitrate **Region 3**

Montecito Creek

LOE ID:	50619
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42148, Nitrate **Region 3**

Montecito Creek

LOE ID:	50638

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42148, Nitrate **Region 3**

Montecito Creek

LOE ID:	50639
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42148, Nitrate **Region 3**

Montecito Creek

LOE ID:	50629
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42148, Nitrate **Region 3**

Montecito Creek

LOE ID:	50628
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42148, Nitrate **Region 3**

Montecito Creek

LOE ID:	50620
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42136**	**Region 3**
Montecito Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Zero of the 11 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, zero of the 11 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceeded the water quality objectives for dissolved oxygen in Cold and Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42136, Oxygen, Dissolved **Region 3**

Montecito Creek

LOE ID:	50621
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin

	Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42136, Oxygen, Dissolved **Region 3**

Montecito Creek

LOE ID:	50622
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42136, Oxygen, Dissolved **Region 3**

Montecito Creek

LOE ID:	50640
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42136, Oxygen, Dissolved **Region 3**

Montecito Creek

LOE ID:	50641
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42136, Oxygen, Dissolved **Region 3**

Montecito Creek

LOE ID:	14001
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42136, Oxygen, Dissolved **Region 3**

Montecito Creek

LOE ID:	14019
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42136, Oxygen, Dissolved **Region 3**

Montecito Creek

LOE ID:	14002
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42136, Oxygen, Dissolved **Region 3**

Montecito Creek

LOE ID:	14000
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42153**	**Region 3**
Montecito Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42153, Temperature, water **Region 3**

Montecito Creek

LOE ID:	14022
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42153, Temperature, water **Region 3**

Montecito Creek

LOE ID:	50625
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42196	Region 3
Montecito Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 11 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and one of the 11 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 11 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42196, Turbidity **Region 3**

Montecito Creek

LOE ID:	14020
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42196, Turbidity — Region 3

Montecito Creek

LOE ID:	14021
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42196, Turbidity — Region 3

Montecito Creek

LOE ID:	50624
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42196, Turbidity **Region 3**

Montecito Creek

LOE ID:	50643
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass

Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42197** **Region 3**

Montecito Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 11 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and three of the 11 samples exceed the water quality objectives for Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and three of the 11 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	50642

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	50623
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	50635
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	50633

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	50630
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Montecito Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	12227
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	12244
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	12228
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	12226
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42197, pH **Region 3**

Montecito Creek

LOE ID:	12225
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected over the time period 1/16/2001-1/2/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41488 Region 3

Montecito Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, this decision will not use the single sample because the laboratoryÂ's method detection limit and reporting limits are greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. This decision will not use the single sample in its decision because the laboratoryÂ's method detection limit and reporting limits are greater than the evaluation guideline and the result was non-detect. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41488, Chlorpyrifos — Region 3

Montecito Creek

LOE ID:	16137
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of

	1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41488, Chlorpyrifos **Region 3**

Montecito Creek

LOE ID:	16138
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42094**	**Region 3**
Montecito Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Siepmann and Finlayson, 2000) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42094, Diazinon **Region 3**

Montecito Creek

LOE ID:	16831
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42094, Diazinon **Region 3**

Montecito Creek

LOE ID:	16832
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41386	Region 3
Montecito Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. One sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). The single sample did not result in a significant toxic effect to one or more test organisms and therefore did not exceed the water quality objective for aquatic life protection.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not result in a significant toxic effect to one or more test organisms and therefore did not exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41386, Toxicity **Region 3**

Montecito Creek

LOE ID:	23882
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41386, Toxicity **Region 3**

Montecito Creek

LOE ID:	24049
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41386, Toxicity **Region 3**

Montecito Creek

LOE ID:	24037
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41386, Toxicity **Region 3**

Montecito Creek

LOE ID:	24036
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Montecito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Montecito Creek was collected at 1 monitoring site [315MTC-Montecito Creek at Jamison Lane]
Temporal Representation:	Data was collected on a single day 12/3/2001. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Millers Canal**
Water Body ID: **CAR3053002020080603171000**
Water Body Type: **River & Stream**

DECISION ID	42160	Region 3
Millers Canal		

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One of one water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. This decision will not use one of the water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single pore water sample collected on May 3, 2006 contributed to the original listing during the 2010 listing cycle. This decision does not use pore water samples in the exceedance count. Additionally, the pore water sample is not included in this decision because the laboratory method detection limit was above the evaluation guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of two samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 42160, Chlorpyrifos **Region 3**

Millers Canal

LOE ID:	16267
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42160, Chlorpyrifos **Region 3**

Millers Canal

LOE ID:	16266

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42160, Chlorpyrifos **Region 3**

Millers Canal

LOE ID:	16187
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42160, Chlorpyrifos **Region 3**

Millers Canal

LOE ID:	16159
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42039	Region 3
Millers Canal		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Twenty-eight of the 55 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Note that the Pajaro River Watershed Nutrient TMDL has been completed and approved by the Regional Water Quality Control Board and is awaiting USEPA approval. The TMDL is the basis of the sources listed in this decision. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-eight of the 55 samples exceed the evaluation guideline and this exceeds the allowable

	frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42039, Chlorophyll-a **Region 3**

Millers Canal

LOE ID:	48399
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 8 of 19 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42039, Chlorophyll-a — Region 3

Millers Canal

LOE ID:	48398
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 8 of 19 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42039, Chlorophyll-a — Region 3

Millers Canal

LOE ID:	13722
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42039, Chlorophyll-a **Region 3**

Millers Canal

LOE ID:	13898
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42039, Chlorophyll-a **Region 3**

Millers Canal

LOE ID:	9340
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31

Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 19 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42039, Chlorophyll-a **Region 3**

Millers Canal

LOE ID:	9339
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 19 of 31 samples exceed the

	criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42216**	**Region 3**
Millers Canal		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Ninety-nine of the 282 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 33 of the 282 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific

beneficial useÂ…Â" and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Note, the Pajaro River Watershed Nutrient TMDL has been approved by the Regional Water Quality Control Board and is currently awaiting approval by USEPA. The TMDL is the basis of the source designations for this decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ninety-nine of the 282 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	11920
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in

	summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	11921
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	11922
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	11900
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 9 of 29 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	11884
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 9 of 29 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	17822
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	226
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 31 of 226 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	17821
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	226

Number of Exceedances:	84
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 84 of 226 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	48415
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 9 of 19 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]

Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	48414
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 9 of 19 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	48412
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 5 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	48413
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	11883
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	11904
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	11882
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 6 of 30 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	13724
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	13627
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	13628
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42216, Oxygen, Dissolved **Region 3**

Millers Canal

LOE ID:	13723
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42785**	**Region 3**
Millers Canal		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Seventy-seven of the 291 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Seventy-seven of the 291 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42785, Temperature, water **Region 3**

Millers Canal

LOE ID:	13758
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42785, Temperature, water **Region 3**

Millers Canal

LOE ID:	48661
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 3 of 20 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42785, Temperature, water **Region 3**

Millers Canal

LOE ID:	17657
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	237
Number of Exceedances:	66
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as

	follows: 66 of 237 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42785, Temperature, water **Region 3**

Millers Canal

LOE ID:	11923
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42785, Temperature, water **Region 3**

Millers Canal

LOE ID:	11901
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 7 of 27 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42171** **Region 3**

Millers Canal

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. A total of 101 of the 106 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 100 of the 106 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 101 of the 106 samples exceed the evaluation guideline for Cold Freshwater Habitat and 100 of the 106 samples exceed the Warm Freshwater Habitat evaluation guideline. These exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42171, Turbidity — Region 3

Millers Canal

LOE ID:	17488
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	61
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 61 of 62 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 9 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 9/28/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42171, Turbidity **Region 3**

Millers Canal

LOE ID:	17489
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	61
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 61 of 62 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 9 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 9/28/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42171, Turbidity **Region 3**

Millers Canal

LOE ID:	11902
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 19 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42171, Turbidity **Region 3**

Millers Canal

LOE ID:	13756
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42171, Turbidity **Region 3**

Millers Canal

LOE ID:	13757
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42171, Turbidity **Region 3**

Millers Canal

LOE ID:	11903
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 19 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-

	Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42171, Turbidity **Region 3**

Millers Canal

LOE ID:	48649
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 17 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42171, Turbidity **Region 3**

Millers Canal

LOE ID:	48650
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 16 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42172**	**Region 3**
Millers Canal		

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. One hundred and twelve of the 326 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 218 of the 326 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred and twelve of the 326 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 218 of the 326 samples exceed the water quality objectives for Drinking Water and Recreation. Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	48416
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 9 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	48648

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 9 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	17748
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	274
Number of Exceedances:	185
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 185 of 274 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	17749
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	274
Number of Exceedances:	86
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 86 of 274 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	17790
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	274
Number of Exceedances:	185
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 185 of 274 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	17789
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	274
Number of Exceedances:	86
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 86 of 274 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10273
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10254
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	26
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 13 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10255
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10237
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 12 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10238
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 13 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10256
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10257
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10147
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 12 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10150
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Millers Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	10253
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 13 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	17747
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	274
Number of Exceedances:	185
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 185 of 274 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and

	Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	48647
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	19
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 14 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	48646

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 14 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	48645
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 14 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	13741
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH — Region 3

Millers Canal

LOE ID:	13740
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH — Region 3

Millers Canal

LOE ID:	13739
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5

Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	13738
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42172, pH **Region 3**

Millers Canal

LOE ID:	13742
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42199	Region 3
Millers Canal		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Six LOEs summarize unionized ammonia data in which zero of the 38 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 370 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 38 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 370 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. and These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42199, Ammonia	**Region 3**
Millers Canal	

LOE ID:	17796
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	334
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 334 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42199, Ammonia **Region 3**

Millers Canal

LOE ID:	48390
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42199, Ammonia **Region 3**

Millers Canal

LOE ID:	48391
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42199, Ammonia **Region 3**

Millers Canal

LOE ID:	48392
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42199, Ammonia **Region 3**

Millers Canal

LOE ID:	9287
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42199, Ammonia **Region 3**

Millers Canal

LOE ID:	9337
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42199, Ammonia **Region 3**

Millers Canal

LOE ID:	9338
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42199, Ammonia **Region 3**

Millers Canal

LOE ID:	13706
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42199, Ammonia **Region 3**

Millers Canal

LOE ID:	13721
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42175**	**Region 3**
Millers Canal		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in sediment samples. Zero of the five sediment samples resulted in a significant toxic effect to one or more test organisms. Fourteen LOEs summarize water samples. Five water samples are summarized in LOEs using each of

the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and nine additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fourteen total samples are available to assess toxic effects in water samples. Three of the fourteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 14 water samples resulted in a significant toxic effect to one or more test organisms and therefore also exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24053
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24034
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]

Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24045
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity — Region 3

Millers Canal

LOE ID:	24044
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity — Region 3

Millers Canal

LOE ID:	24043
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24008
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected on a single day 5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24042
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival

	endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24041
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24058
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24057
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

	December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24046
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24010
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24009
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	23878
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected on a single day 5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24033
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	24056
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth

	(Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	79219
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Two of the nine samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth, Selenastrum capricornutum growth. The two samples exhibited significant toxicity to Ceriodaphnia dubia (9/30/08 and1/27/09). It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305FRA, Millers Canal.
Temporal Representation:	The samples were collected between October 2007 and March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version) Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	79220
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	

Spatial Representation:	The samples were collected at 305FRA, Millers Canal.
Temporal Representation:	The samples were collected in April 2007, May 2008 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. the Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	55219
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Two of the nine samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth, Selenastrum capricornutum growth. The two samples exhibited significant toxicity to Ceriodaphnia dubia (9/30/08 and1/27/09). It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305FRA, Millers Canal.
Temporal Representation:	The samples were collected between October 2007 and March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version) Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42175, Toxicity **Region 3**

Millers Canal

LOE ID:	55224
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 305FRA, Millers Canal.
Temporal Representation:	The samples were collected in April 2007, May 2008 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. the Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42381**	**Region 3**
Millers Canal		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy.

No new data are assessed.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2.

This Evaluation Guideline is relevant for Millers Canal as it is a tributary to Pajaro River. In fact, Millers Canal was constructed as a bypass for the River to convey flows from the upper watershed (including Pacheco Creek) and San Felipe Lake the lower River and the confluences with Llagas and Uvas Creeks. A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Pajaro River and Pacheco Creek as having "Definite run or population". Therefore, discharge of turbid water from Millers Canal into Pajaro River is specifically prohibited by the General Objectives in the Central Coast Water Quality Control Plan which states that waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. However, it should be noted that Millers Canal is a channelized conveyance for the Pajaro River. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of 25 samples exceeded the water quality objective for Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Pajaro River Watershed Nutrient TMDL has been approved by USEPA
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. However, a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard and so there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List.

Line of Evidence (LOE) for Decision ID 42381, Fecal Coliform **Region 3**

Millers Canal

LOE ID:	10235
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 15 of 25 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42381, Fecal Coliform **Region 3**

Millers Canal

LOE ID:	10236
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42170	Region 3
Millers Canal		

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Pajaro River Nitrate (including Llagas Creek) TMDL
TMDL Project Code:	139
Date TMDL Approved by USEPA:	10/13/2006
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 362 samples for nitrate and zero of the 13 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply Beneficial Use. However, two of the 13 nitrate/nitrate samples exceed evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment. 1) This water segment is on the 303(d) List due to low dissolved oxygen. Dissolved oxygen for this water body ranged from 3.42 mg/L to 17.56 mg/L, frequently exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L, and sometimes exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) This water segment is on the 303(d) List due to elevated chlorophyll a concentrations. Water column chlorophyll a concentration averaged 67.07 ug/L and peaked at 284.10 ug /L, and frequently exceeded the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 13 nitrate/nitrate samples exceed evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. There is evidence in support of the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment including low and highly variable dissolved oxygen concentrations and high water column chlorophyll a concentrations. 4. The Pajaro River Nitrate TMDL has been approved by USEPA on 10/13/2006. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42170, Nitrate **Region 3**

Millers Canal

LOE ID:	48400
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42170, Nitrate **Region 3**

Millers Canal

LOE ID:	48401
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42170, Nitrate **Region 3**

Millers Canal

LOE ID:	48411
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Millers Canal to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA - Millers Canal]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42170, Nitrate **Region 3**

Millers Canal

LOE ID:	17674
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	336
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 336 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 11 monitoring sites [MC-FLR - Millers Canal at Frazer Lake Rd., MC-2, MC-3, MC-4, MC-5, MC-6, MC-7, MC-9, MC-10, MC-12, MC-11]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42170, Nitrate **Region 3**

Millers Canal

LOE ID:	9341
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42202	Region 3
Millers Canal		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceeded the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42202, Diazinon	**Region 3**
Millers Canal	

LOE ID:	16689
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42202, Diazinon **Region 3**

Millers Canal

LOE ID:	16838
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42202, Diazinon **Region 3**

Millers Canal

LOE ID:	16839
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson

	(2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42202, Diazinon **Region 3**

Millers Canal

LOE ID:	16690
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	44823	Region 3
Millers Canal		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. However, it should be noted that Millers Canal is a channelized conveyance for the Pajaro River. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 15 samples exceeded the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44823, Escherichia coli (E. coli)	**Region 3**
Millers Canal	

LOE ID:	10148
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44823, Escherichia coli (E. coli) **Region 3**

Millers Canal

LOE ID:	10149
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Millers Canal to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Millers Canal was collected at 1 monitoring site [305FRA-Miller's Canal at Frazier Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Merrit Ditch**
Water Body ID: **CAR3091101020080604152147**
Water Body Type: **River & Stream**

DECISION ID **42084** **Region 3**
Merrit Ditch

Pollutant: **Turbidity**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2018
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Fifty-eight of the 65 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 55 of the 68 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-eight of the 65 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 55 of the 68 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. These exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42084, Turbidity **Region 3**
Merrit Ditch

LOE ID: 14503

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 22 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42084, Turbidity **Region 3**

Merrit Ditch

LOE ID:	48380
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 33 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42084, Turbidity **Region 3**

Merrit Ditch

LOE ID:	48379
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 36 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42084, Turbidity **Region 3**

Merrit Ditch

LOE ID:	14502
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 22 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42068** **Region 3**

Merrit Ditch

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess pollutant. Four LOEs summarize unionized ammonia data in which seven of the 44 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 66 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 44 samples exceed the water quality objective for unionized ammonia and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed nutrient TMDL was approved by USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42068, Ammonia **Region 3**

Merrit Ditch

LOE ID:	48385
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 4 of 20 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42068, Ammonia **Region 3**

Merrit Ditch

LOE ID:	14724
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42068, Ammonia **Region 3**

Merrit Ditch

LOE ID:	14723
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42068, Ammonia — Region 3

Merrit Ditch

LOE ID:	14464
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42068, Ammonia — Region 3

Merrit Ditch

LOE ID:	48373
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories, EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42068, Ammonia **Region 3**

Merrit Ditch

LOE ID:	48374
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 4 of 20 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	42293	Region 3
Merrit Ditch		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Twenty-six lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 22 nitrate samples and 44 of the 53 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Twenty-two of the 22 nitrate samples and 38 of the 39 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 4.31 mg/L to 19.54 mg/L. This exceeds (falls below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Floating algal mats ranged up to 100 % cover, often exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 3.21 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 76 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 but not the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 190 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2, but not the

Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).
6) Water column chlorophyll a concentration ranged up to 30.92 ug /L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of the 22 nitrate samples and 44 of the 53 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Twenty-two of the 22 nitrate samples and 38 of the 39 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment..
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2005.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	48408
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	28166
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER -

	Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	14289
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	48406
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	28165
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	48410
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 34 of 39 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	48359
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 38 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	48407
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	14451
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42293, Nitrate **Region 3**

Merrit Ditch

LOE ID:	48409
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 38 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42045**	**Region 3**
Merrit Ditch		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Twelve of the 61 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and four of the 61 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d)

List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 61 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed nutrient TMDL was approved by USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42045, Oxygen, Dissolved **Region 3**

Merrit Ditch

LOE ID:	48363
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 8 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42045, Oxygen, Dissolved **Region 3**

Merrit Ditch

LOE ID:	48362
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 8 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42045, Oxygen, Dissolved **Region 3**

Merrit Ditch

LOE ID:	48361
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 1 of 36 samples exceed the

	criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42045, Oxygen, Dissolved **Region 3**

Merrit Ditch

LOE ID:	48360
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 4 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42045, Oxygen, Dissolved **Region 3**

Merrit Ditch

LOE ID:	14684
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 17 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42045, Oxygen, Dissolved **Region 3**

Merrit Ditch

LOE ID:	14754
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 17 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42045, Oxygen, Dissolved **Region 3**

Merrit Ditch

LOE ID:	14741
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42045, Oxygen, Dissolved **Region 3**

Merrit Ditch

LOE ID:	14740
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 8 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER -

	Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41841	Region 3
Merrit Ditch		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Four LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in sediment samples. Five of the five sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Eight LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eighteen total samples are available to assess toxic effects in water samples. Twelve of the eighteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 5 sediment samples and 12 of the 18 water samples resulted in a significant toxic effect to one or more test organisms and therefore also exceed the water quality objective for aquatic life protection and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL was approved by USEPA on

October 7, 2011.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	24017
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	24006
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 3/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	24050
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	24040
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	24007
Pollutant:	Vertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 3/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	24018
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	23874
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 4/12/2005-5/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	23873
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival

	endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 4/12/2005-5/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	55140
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Ten of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples exhibited significant toxicity to survival of Ceriodaphnia dubia (8 samples), survival Hyalella azteca (1 sample) and growth Pimephales promelas (1 sample). It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309MER Merritt Ditch.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	55141
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	

Spatial Representation:	The samples were collected at 309MER Merritt Ditch.
Temporal Representation:	The samples were collected annualy in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	79217
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309MER Merritt Ditch.
Temporal Representation:	The samples were collected annualy in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41841, Toxicity **Region 3**

Merrit Ditch

LOE ID:	79216

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Ten of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples exhibited significant toxicity to survival of Ceriodaphnia dubia (8 samples), survival Hyalella azteca (1 sample) and growth Pimephales promelas (1 sample). It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309MER Merritt Ditch.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42108**	**Region 3**
Merrit Ditch		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 60 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 60 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42108, Chlorophyll-a **Region 3**

Merrit Ditch

LOE ID:	14738
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42108, Chlorophyll-a **Region 3**

Merrit Ditch

LOE ID:	14739
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42108, Chlorophyll-a **Region 3**

Merrit Ditch

LOE ID:	48386
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42108, Chlorophyll-a **Region 3**

Merrit Ditch

LOE ID:	48387
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **42205** **Region 3**

Merrit Ditch

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of five water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000). Zero of three samples exceeded the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of five water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42205, Chlorpyrifos — Region 3

Merrit Ditch

LOE ID:	15127
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as

	follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42205, Chlorpyrifos **Region 3**

Merrit Ditch

LOE ID:	15128
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42205, Chlorpyrifos **Region 3**

Merrit Ditch

LOE ID:	48395
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier

et al., 2005).

Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42205, Chlorpyrifos **Region 3**

Merrit Ditch

LOE ID:	48388
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42205, Chlorpyrifos **Region 3**

Merrit Ditch

LOE ID:	55149
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48467** **Region 3**

Merrit Ditch

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA National Recommended Water Quality Criteria). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48467, Demeton **Region 3**

Merrit Ditch

LOE ID:	55150
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48467, Demeton **Region 3**

Merrit Ditch

LOE ID:	55151
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48467, Demeton **Region 3**

Merrit Ditch

LOE ID:	55153
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48467, Demeton **Region 3**

Merrit Ditch

LOE ID:	55152
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology

Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 48468 Region 3

Merrit Ditch

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA maximum acceptable toxicant concentration (MATC)) and zero of the five samples exceed the evaluation guideline for drinking water (National health advisory level (USEPA IRIS one-in-a-million cancer risk estimate from oral exposure). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48468, Dichlorvos Region 3

Merrit Ditch

LOE ID:	55092
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48468, Dichlorvos **Region 3**

Merrit Ditch

LOE ID:	55158
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48468, Dichlorvos **Region 3**

Merrit Ditch

LOE ID:	55157
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48468, Dichlorvos **Region 3**

Merrit Ditch

LOE ID:	55160
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48468, Dichlorvos **Region 3**

Merrit Ditch

LOE ID:	55159
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48468, Dichlorvos **Region 3**

Merrit Ditch

LOE ID:	79218
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48469**	**Region 3**
Merrit Ditch		

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA maximum acceptable toxicant concentration (MATC)) and zero of the five samples exceed the evaluation guideline for drinking water (National health advisory level (California Department of Health Services notification level). This sample

size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48469, Dimethoate **Region 3**

Merrit Ditch

LOE ID:	55097
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48469, Dimethoate **Region 3**

Merrit Ditch

LOE ID:	55096
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48469, Dimethoate **Region 3**

Merrit Ditch

LOE ID:	55095
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48469, Dimethoate **Region 3**

Merrit Ditch

LOE ID:	55093
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48469, Dimethoate **Region 3**

Merrit Ditch

LOE ID:	55098
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48469, Dimethoate **Region 3**

Merrit Ditch

LOE ID:	55094
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48473**	**Region 3**
Merrit Ditch		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy,

the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48473, Disulfoton **Region 3**

Merrit Ditch

LOE ID:	55102
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48473, Disulfoton **Region 3**

Merrit Ditch

LOE ID:	55101
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48474** **Region 3**

Merrit Ditch

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA maximum acceptable toxicant concentration (MATC)). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48474, Ethoprop **Region 3**

Merrit Ditch

LOE ID:	55105
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and

	NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48474, Ethoprop **Region 3**

Merrit Ditch

LOE ID:	55106
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48474, Ethoprop **Region 3**

Merrit Ditch

LOE ID:	55104
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48474, Ethoprop **Region 3**

Merrit Ditch

LOE ID:	55103

Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48470**	**Region 3**
Merrit Ditch		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (Palumbo, A.J., et al., 2012) and zero of the five samples exceed the evaluation guideline for drinking water (National health advisory level (USEPA drinking water health advisory). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is

needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48470, Malathion **Region 3**

Merrit Ditch

LOE ID:	55110
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48470, Malathion **Region 3**

Merrit Ditch

LOE ID:	55107
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48470, Malathion **Region 3**

Merrit Ditch

LOE ID:	55109
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48470, Malathion **Region 3**

Merrit Ditch

LOE ID:	55108
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48470, Malathion **Region 3**

Merrit Ditch

LOE ID:	55112
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48470, Malathion **Region 3**

Merrit Ditch

LOE ID:	55111
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48471**	**Region 3**
Merrit Ditch		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (CDFW, 1992) and zero of the five samples exceed the evaluation guideline for drinking water (USEPA IRIS reference dose). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not

supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48471, Methyl Parathion **Region 3**

Merrit Ditch

LOE ID:	55117
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48471, Methyl Parathion **Region 3**

Merrit Ditch

LOE ID:	55118
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48471, Methyl Parathion **Region 3**

Merrit Ditch

LOE ID:	55113
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48471, Methyl Parathion **Region 3**

Merrit Ditch

LOE ID:	55116
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48471, Methyl Parathion **Region 3**

Merrit Ditch

LOE ID:	55114
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48471, Methyl Parathion **Region 3**

Merrit Ditch

LOE ID:	55115
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48472** **Region 3**

Merrit Ditch

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) and zero of the five samples exceed the evaluation guideline for drinking water (National Academy of Sciences health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48472, Phorate **Region 3**

Merrit Ditch

LOE ID:	55133
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]

Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48472, Phorate **Region 3**

Merrit Ditch

LOE ID:	55134
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48472, Phorate **Region 3**

Merrit Ditch

LOE ID:	55135
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48472, Phorate **Region 3**

Merrit Ditch

LOE ID:	55136
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a

	factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48472, Phorate **Region 3**

Merrit Ditch

LOE ID:	55132
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48472, Phorate **Region 3**

Merrit Ditch

LOE ID:	55131
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **42073** **Region 3**

Merrit Ditch

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Ten of the 64 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 64 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42073, Temperature, water **Region 3**

Merrit Ditch

LOE ID:	48389
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 6 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]

Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42073, Temperature, water **Region 3**

Merrit Ditch

LOE ID:	14504
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 4 of 25 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41482 **Region 3**

Merrit Ditch

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Seven of the 61 samples exceed the water quality objective for Cold and Warm Freshwater Habitats, and 17 of the 61 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 61 samples exceed the water quality objective for Cold and Warm Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41482, pH — Region 3

Merrit Ditch

LOE ID:	48375
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 13 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41482, pH **Region 3**

Merrit Ditch

LOE ID:	14501
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41482, pH **Region 3**

Merrit Ditch

LOE ID:	48377
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 13 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41482, pH **Region 3**

Merrit Ditch

LOE ID:	48378
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to

	determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41482, pH **Region 3**

Merrit Ditch

LOE ID:	48364
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41482, pH **Region 3**

Merrit Ditch

LOE ID:	14757
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 4 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41482, pH **Region 3**

Merrit Ditch

LOE ID:	48376
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	36
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 13 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41482, pH **Region 3**

Merrit Ditch

LOE ID:	14756
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 4 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41482, pH **Region 3**

Merrit Ditch

LOE ID:	14755
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41482, pH **Region 3**

Merrit Ditch

LOE ID:	14758
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 4 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42206** **Region 3**

Merrit Ditch

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The decision for the 2010 303(d) list used 0.16 ug/L (Siepmann and Finlayson, 2000) as the evaluation guideline and resulted in zero out of two samples exceeding this guideline. However, 0.1 ug/L is now being used as the evaluation guideline set to protect for aquatic life beneficial uses (Finlayson, 2004), which results in one out of two samples exceeding the evaluation guideline. New samples were evaluated during this listing cycle, and when combined with 2010 listing cycle data, two out of five samples exceeding the evaluation guideline. Zero of the three samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of five samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42206, Diazinon **Region 3**

Merrit Ditch

LOE ID:	48397
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42206, Diazinon **Region 3**

Merrit Ditch

LOE ID:	15129
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42206, Diazinon **Region 3**

Merrit Ditch

LOE ID:	15130
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Merritt Ditch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Merritt Ditch was collected at 1 monitoring site [309MER - Merrit Ditch upstream Highway 183]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42206, Diazinon **Region 3**

Merrit Ditch

LOE ID:	48396
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Merrit Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [309MER - Merritt Ditch above Highway 183]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42206, Diazinon **Region 3**

Merrit Ditch

LOE ID:	55156
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Merrit Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Merrit Ditch was collected at 1 monitoring site [Merritt Ditch - 309MER]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **McWay Creek**
Water Body ID: **CAR3080004020080605162532**
Water Body Type: **River & Stream**

DECISION ID **42129** **Region 3**
McWay Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42129, Escherichia coli (E. coli) **Region 3**
McWay Creek

LOE ID: 18445

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42129, Escherichia coli (E. coli) **Region 3**

McWay Creek

LOE ID:	18446
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42130 **Region 3**

McWay Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42130, Nitrate **Region 3**

McWay Creek

LOE ID:	18227
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**42182**	**Region 3**
McWay Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the Cold or Warm Freshwater Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the Cold or Warm Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42182, Oxygen, Dissolved **Region 3**

McWay Creek

LOE ID:	17963
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42182, Oxygen, Dissolved **Region 3**

McWay Creek

LOE ID:	17962
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**42183**	**Region 3**
McWay Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42183, Temperature, water **Region 3**

McWay Creek

LOE ID:	18838
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **42184** **Region 3**

McWay Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42184, pH **Region 3**

McWay Creek

LOE ID:	18758
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42184, pH — Region 3

McWay Creek

LOE ID:	18812
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42184, pH — Region 3

McWay Creek

LOE ID:	18814
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42184, pH **Region 3**

McWay Creek

LOE ID:	18813
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42184, pH **Region 3**

McWay Creek

LOE ID:	18757
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for McWay Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for McWay Creek was collected at 1 monitoring site [308-MCWAY-31 - McWay Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Maria Ygnacio Creek**
Water Body ID: **CAR3153102020080612165648**
Water Body Type: **River & Stream**

DECISION ID **44763** **Region 3**
Maria Ygnacio Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for E. coli non-contact recreation is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Six of 17 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 14 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 17 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44763, Escherichia coli (E. coli) **Region 3**
Maria Ygnacio Creek

LOE ID: 14963

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 44763, Escherichia coli (E. coli) **Region 3**

Maria Ygnacio Creek

LOE ID:	14964
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 44763, Escherichia coli (E. coli) **Region 3**

Maria Ygnacio Creek

LOE ID:	50809
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41540	Region 3
Maria Ygnacio Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for Fecal Coliform non-contact recreation is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using tables 3.2 and 4.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Seven of 13 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 2 of 13 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 13 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41540, Fecal Coliform	**Region 3**
Maria Ygnacio Creek	

LOE ID:	50808
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41540, Fecal Coliform **Region 3**

Maria Ygnacio Creek

LOE ID:	50811
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41540, Fecal Coliform **Region 3**

Maria Ygnacio Creek

LOE ID:	12245
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 5 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-1/3/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41540, Fecal Coliform — Region 3

Maria Ygnacio Creek

LOE ID:	12286
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-1/3/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42097 — Region 3

Maria Ygnacio Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seven of the 14 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 14 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42097, Sodium **Region 3**

Maria Ygnacio Creek

LOE ID:	10435
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42097, Sodium **Region 3**

Maria Ygnacio Creek

LOE ID:	50739
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41438** **Region 3**

Maria Ygnacio Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Six of the 27 samples exceed the water quality objective for Agriculture, five of the 27 samples exceed the water quality objectives for Cold Freshwater Habitats, and eight of the 27 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 27 samples exceed the water quality objective for Agriculture, five of the 27 samples exceed the water quality objectives for Cold Freshwater Habitats, and eight of the 27 samples exceed the water quality objectives for Drinking Water and Recreation. Each of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41438, pH — Region 3

Maria Ygnacio Creek

LOE ID:	50812
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	50810
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	50794
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	50738
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	50774
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	14912
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	14930
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	14929
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	14928
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12323

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12322
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12340
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer

	months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12339
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12338
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	14931
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12319
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12303
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12302
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for

	Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12301
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41438, pH **Region 3**

Maria Ygnacio Creek

LOE ID:	12320
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42201	Region 3
Maria Ygnacio Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which one of the 12 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 14 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 12 samples exceed the water quality objective for unionized ammonia set to protect aquatic life but, zero of the 14 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42201, Ammonia	**Region 3**
Maria Ygnacio Creek	

LOE ID:	10614
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue].
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42201, Ammonia **Region 3**

Maria Ygnacio Creek

LOE ID:	10685
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).

Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42201, Ammonia **Region 3**

Maria Ygnacio Creek

LOE ID:	50755
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 42201, Ammonia **Region 3**

Maria Ygnacio Creek

LOE ID:	50790
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42042** **Region 3**

Maria Ygnacio Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 14 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 14 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42042, Boron **Region 3**

Maria Ygnacio Creek

LOE ID:	50581
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42042, Boron **Region 3**

Maria Ygnacio Creek

LOE ID:	10628
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42047** **Region 3**

Maria Ygnacio Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 14 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 14 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42047, Chloride **Region 3**

Maria Ygnacio Creek

LOE ID:	10686
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42047, Chloride **Region 3**

Maria Ygnacio Creek

LOE ID:	50582
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42046	Region 3
Maria Ygnacio Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42046, Chlorophyll-a	**Region 3**
Maria Ygnacio Creek	

LOE ID:	50756
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42046, Chlorophyll-a **Region 3**

Maria Ygnacio Creek

LOE ID:	10432
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41569**	**Region 3**
Maria Ygnacio Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. One of the 27 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Two of the 3 nitrate samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use. Zero of the 3 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Two of the 3 nitrate/nitrite samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. One of the 27 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Two of the 3 nitrate samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use. Zero of the 3 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Two of the 3 nitrate/nitrite samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	Insufficient evidence was found to support nitrate causing impairment for Cold water habitats. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID:	10433
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID:	14776
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/4/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID:	10434
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 11

samples exceed the criterion for Nitrate as N.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference: Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A
Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]

Temporal Representation: Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID: 14775

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 13
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.

Data Reference: Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate

	exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/4/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID:	50584
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID:	50736
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID:	50758
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID:	50757
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID:	50793
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41569, Nitrate **Region 3**

Maria Ygnacio Creek

LOE ID:	50792
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **48312** **Region 3**

Maria Ygnacio Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48312, Nitrogen, Nitrite **Region 3**

Maria Ygnacio Creek

LOE ID:	50737
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41395** **Region 3**

Maria Ygnacio Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Three of the 26 samples exceed the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 26 samples exceed the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41395, Oxygen, Dissolved **Region 3**

Maria Ygnacio Creek

LOE ID:	50773
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41395, Oxygen, Dissolved **Region 3**

Maria Ygnacio Creek

LOE ID:	50772
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41395, Oxygen, Dissolved **Region 3**

Maria Ygnacio Creek

LOE ID:	14061
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41395, Oxygen, Dissolved **Region 3**

Maria Ygnacio Creek

LOE ID:	14039
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41395, Oxygen, Dissolved **Region 3**

Maria Ygnacio Creek

LOE ID:	14060
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41395, Oxygen, Dissolved **Region 3**

Maria Ygnacio Creek

LOE ID:	15181
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41395, Oxygen, Dissolved **Region 3**

Maria Ygnacio Creek

LOE ID:	15199
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41395, Oxygen, Dissolved **Region 3**

Maria Ygnacio Creek

LOE ID:	14040
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41558	Region 3
Maria Ygnacio Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 25 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table

3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 25 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41558, Specific Conductivity **Region 3**

Maria Ygnacio Creek

LOE ID:	12321
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41558, Specific Conductivity **Region 3**

Maria Ygnacio Creek

LOE ID:	12300
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41558, Specific Conductivity **Region 3**

Maria Ygnacio Creek

LOE ID:	15070
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 5/4/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41558, Specific Conductivity **Region 3**

Maria Ygnacio Creek

LOE ID:	50583
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41424** **Region 3**

Maria Ygnacio Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 26 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 26 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41424, Temperature, water **Region 3**

Maria Ygnacio Creek

LOE ID:	50776
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41424, Temperature, water **Region 3**

Maria Ygnacio Creek

LOE ID:	14080
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as

	follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41424, Temperature, water **Region 3**

Maria Ygnacio Creek

LOE ID:	15044
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41424, Temperature, water **Region 3**

Maria Ygnacio Creek

LOE ID:	14059
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41425	Region 3
Maria Ygnacio Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Five of the 26 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 26 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41425, Turbidity	**Region 3**
Maria Ygnacio Creek	

LOE ID:	14063
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected on a single day 7/16/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41425, Turbidity **Region 3**

Maria Ygnacio Creek

LOE ID:	14042
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-12/5/2001. Santa Barbara Coast is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41425, Turbidity **Region 3**

Maria Ygnacio Creek

LOE ID:	15007
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-6/6/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41425, Turbidity **Region 3**

Maria Ygnacio Creek

LOE ID:	50775
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41393**	**Region 3**
Maria Ygnacio Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of zero water samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use the two water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41393, Chlorpyrifos **Region 3**

Maria Ygnacio Creek

LOE ID:	16139
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]

Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41394 **Region 3**

Maria Ygnacio Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41394, Diazinon **Region 3**

Maria Ygnacio Creek

LOE ID:	16833
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41592**	**Region 3**
Maria Ygnacio Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and

zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in water samples. Zero of the two water samples resulted in a significant toxic effect to one or more test organisms.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41592, Toxicity **Region 3**

Maria Ygnacio Creek

LOE ID:	24028
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41592, Toxicity **Region 3**

Maria Ygnacio Creek

LOE ID:	24026
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [

	315MYC-Maria Ynacio Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41568 Region 3

Maria Ygnacio Creek

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedences supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of 14 samples exceeded the water quality objective for Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41568, Enterococcus Region 3

Maria Ygnacio Creek

LOE ID:	15123
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 9 of 14 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41568, Enterococcus **Region 3**

Maria Ygnacio Creek

LOE ID:	14986
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Maria Ygnacio Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Maria Ygnacio Creek was collected at 1 monitoring site [MY1 - Maria Ygnacio Creek aboce confluence with Atascadero Creek]
Temporal Representation:	Data was collected over the time period 1/12/2003-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Malpaso Creek**
Water Body ID: **CAR3080001320080605154616**
Water Body Type: **River & Stream**

DECISION ID **41574** **Region 3**
Malpaso Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41574, Escherichia coli (E. coli) **Region 3**
Malpaso Creek

LOE ID: 18314

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41574, Escherichia coli (E. coli) Region 3

Malpaso Creek

LOE ID:	18313
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41409 Region 3

Malpaso Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal & Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal & Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41409, Nitrate Region 3

Malpaso Creek

LOE ID:	18467
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41410**	**Region 3**
Malpaso Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the Cold Freshwater Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 samples exceed the Cold Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41410, Oxygen, Dissolved **Region 3**

Malpaso Creek

LOE ID:	18251
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41410, Oxygen, Dissolved **Region 3**

Malpaso Creek

LOE ID:	17976
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41411**	**Region 3**
Malpaso Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41411, Temperature, water **Region 3**

Malpaso Creek

LOE ID:	18632
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **42194** **Region 3**

Malpaso Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective for Cold or Warm Freshwater Habitat, Municipal and Domestic Supply, Water Contact Recreation and Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objective for Cold or Warm Freshwater Habitat, Municipal and Domestic Supply, Water Contact Recreation and Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42194, pH **Region 3**

Malpaso Creek

LOE ID:	19133
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42194, pH **Region 3**

Malpaso Creek

LOE ID:	19134
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42194, pH **Region 3**

Malpaso Creek

LOE ID:	19116
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42194, pH **Region 3**

Malpaso Creek

LOE ID:	19115
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42194, pH **Region 3**

Malpaso Creek

LOE ID:	19132
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Malpaso Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Malpaso Creek was collected at 1 monitoring site [308-MALPA-31 - Malpaso Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Little Oso Flaco Creek**
Water Body ID: **CAR3121003020080611165546**
Water Body Type: **River & Stream**

DECISION ID	40963	Region 3
Little Oso Flaco Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Four lines of evidence are available in the administrative record to assess this pollutant. Six of 23 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 23 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 23 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40963, Fecal Coliform — Region 3

Little Oso Flaco Creek

LOE ID:	11642
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40963, Fecal Coliform — Region 3

Little Oso Flaco Creek

LOE ID:	11641
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40963, Fecal Coliform **Region 3**

Little Oso Flaco Creek

LOE ID:	50727
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40963, Fecal Coliform **Region 3**

Little Oso Flaco Creek

LOE ID:	50422
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

appropriate.

QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42048	Region 3
Little Oso Flaco Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Twenty lines of evidence are available in the administrative record to assess this pollutant. Ten of 12 nitrate samples exceed the water quality objective for the Agricultural Supply beneficial use. Forty-one of the 42 nitrate samples and 60 of the 63 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial uses. Forty-two of 42 nitrate samples 47 of the 47 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 3.15 mg/L to 15.8 mg/L, commonly exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentrations averaged 3.29 and peaked at 18.42 ug/L, exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Floating mats ranged from 0 to 100% cover, frequently exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 3.02 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 68 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 but not the warm water screening threshold of 80 grams/m2, (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 171 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2, but not the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 12 nitrate samples exceed the water quality objective for the Agricultural Supply beneficial use. Forty-one of the 42 nitrate samples and 60 of the 63 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial uses. Forty-two of 42 nitrate samples 47 of the 47 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.
4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on 03/08/2016.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	50746
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	50420
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	50745
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	50391
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	50390
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	50408
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42048, Nitrate — Region 3

Little Oso Flaco Creek

LOE ID:	54613
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42048, Nitrate — Region 3

Little Oso Flaco Creek

LOE ID:	48298
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	48299
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	48300
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 37 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	48301
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	9690
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 16 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	14305
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	6

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	15218
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 15 of 16 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 3/22/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	27869
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	27868
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	27866
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	27867
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	48296
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42048, Nitrate **Region 3**

Little Oso Flaco Creek

LOE ID:	48297
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **44834** **Region 3**

Little Oso Flaco Creek

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Six LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and two additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in sediment samples. Four of the four sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Eight LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eighteen total samples are available to assess toxic effects in water samples. Eleven of the eighteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to

result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 4 sediment samples and 11 of the 18 water samples resulted in a significant toxic effect to one or more test organisms and therefore also exceed the water quality objective for aquatic life protection and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Pesticide and Toxicity TMDL has been approved by USEPA on August 31, 2015.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	24167
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	24149
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

	December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected on a single day 5/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	23696
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]

Temporal Representation:	Data was collected on a single day 4/19/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	24150
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected on a single day 5/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	24158
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	24131
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at Train Trussel].
Temporal Representation:	Data was collected over the time period 7/26/2005-8/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	24159
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	24132

Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 7/26/2005-8/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	24160
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	24151
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected on a single day 4/19/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	54635
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	9
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Nine of the eleven samples

	exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia (9/24/08, 1/28/09, 9/17/09, 1/19/10, 3/30/10, 10/26/07, 1/24/08, 3/26/08), and growth of Selenastrum capricornutum (9/24/08, 1/28/09, 10/25/07).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312OFN-Little Oso Flaco Creek at train Trussel.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	54636
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate sediment toxicity. Two of the two samples exhibited significant toxicity. Samples exhibited significant toxicity to survival growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312OFN-Little Oso Flaco Creek at train Trussel.
Temporal Representation:	The samples were collected in April 2007 and 2008.

Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	78978
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate sediment toxicity. Two of the two samples exhibited significant toxicity. Samples exhibited significant toxicity to survival growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312OFN-Little Oso Flaco Creek at train Trussel.
Temporal Representation:	The samples were collected in April 2007 and 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44834, Toxicity **Region 3**

Little Oso Flaco Creek

LOE ID:	78979
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11

Number of Exceedances:	9
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Nine of the eleven samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia (9/24/08, 1/28/09, 9/17/09, 1/19/10, 3/30/10, 10/26/07, 1/24/08, 3/26/08), and growth of Selenastrum capricornutum (9/24/08, 1/28/09, 10/25/07).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312OFN-Little Oso Flaco Creek at train Trussel.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**41103**	**Region 3**
Little Oso Flaco Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which one of the 72 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 87 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 72 samples exceed the water quality objective for unionized ammonia set to protect aquatic life but zero of the 87 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	14352
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41103, Ammonia — Region 3

Little Oso Flaco Creek

LOE ID:	14358
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41103, Ammonia — Region 3

Little Oso Flaco Creek

LOE ID:	48561
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 4/11/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	48560
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 4/11/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	48545
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	14359
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	9674
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	9687
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia

	(NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	9675
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	50380
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	50729
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41103, Ammonia **Region 3**

Little Oso Flaco Creek

LOE ID:	50406
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40981** **Region 3**

Little Oso Flaco Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 81 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 81 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40981, Chlorophyll-a **Region 3**

Little Oso Flaco Creek

LOE ID:	50730
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40981, Chlorophyll-a **Region 3**

Little Oso Flaco Creek

LOE ID:	50381
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40981, Chlorophyll-a **Region 3**

Little Oso Flaco Creek

LOE ID:	48563
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40981, Chlorophyll-a **Region 3**

Little Oso Flaco Creek

LOE ID:	14373
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface

	water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40981, Chlorophyll-a **Region 3**

Little Oso Flaco Creek

LOE ID:	9689
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40981, Chlorophyll-a **Region 3**

Little Oso Flaco Creek

LOE ID:	9688
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40981, Chlorophyll-a **Region 3**

Little Oso Flaco Creek

LOE ID:	48562
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40981, Chlorophyll-a **Region 3**

Little Oso Flaco Creek

LOE ID:	14374
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41031	Region 3
Little Oso Flaco Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Zero of the three samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41031, Chlorpyrifos	**Region 3**
Little Oso Flaco Creek	

LOE ID:	15269
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41031, Chlorpyrifos **Region 3**

Little Oso Flaco Creek

LOE ID:	48292
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41031, Chlorpyrifos **Region 3**

Little Oso Flaco Creek

LOE ID:	48293
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).

Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41031, Chlorpyrifos **Region 3**

Little Oso Flaco Creek

LOE ID:	15282
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41031, Chlorpyrifos **Region 3**

Little Oso Flaco Creek

LOE ID:	54646
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **47692** **Region 3**

Little Oso Flaco Creek

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (National Recommended Water Quality

Criteria, 2009).This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47692, Demeton **Region 3**

Little Oso Flaco Creek

LOE ID:	54650
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47692, Demeton **Region 3**

Little Oso Flaco Creek

LOE ID:	54649
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47692, Demeton **Region 3**

Little Oso Flaco Creek

LOE ID:	54647
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial

	use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47692, Demeton **Region 3**

Little Oso Flaco Creek

LOE ID:	54648
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**40975**	**Region 3**
Little Oso Flaco Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the three samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40975, Diazinon **Region 3**

Little Oso Flaco Creek

LOE ID:	54653
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40975, Diazinon **Region 3**

Little Oso Flaco Creek

LOE ID:	14273
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40975, Diazinon **Region 3**

Little Oso Flaco Creek

LOE ID:	48294
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40975, Diazinon **Region 3**

Little Oso Flaco Creek

LOE ID:	48295
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Line of Evidence (LOE) for Decision ID 40975, Diazinon **Region 3**

Little Oso Flaco Creek

LOE ID:	15283
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **47695** **Region 3**

Little Oso Flaco Creek

Pollutant: **Dichlorvos**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47695, Dichlorvos **Region 3**

Little Oso Flaco Creek

LOE ID:	54580
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47695, Dichlorvos **Region 3**

Little Oso Flaco Creek

LOE ID:	54579
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47695, Dichlorvos **Region 3**

Little Oso Flaco Creek

LOE ID:	54583
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47695, Dichlorvos **Region 3**

Little Oso Flaco Creek

LOE ID:	54582

Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47695, Dichlorvos **Region 3**

Little Oso Flaco Creek

LOE ID:	54581
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47695, Dichlorvos **Region 3**

Little Oso Flaco Creek

LOE ID:	78994
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**47699**	**Region 3**
Little Oso Flaco Creek		

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (California Department of Health Services notification level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47699, Dimethoate **Region 3**

Little Oso Flaco Creek

LOE ID:	54587
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47699, Dimethoate **Region 3**

Little Oso Flaco Creek

LOE ID:	54584

Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47699, Dimethoate **Region 3**

Little Oso Flaco Creek

LOE ID:	54585
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47699, Dimethoate **Region 3**

Little Oso Flaco Creek

LOE ID:	54586
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47699, Dimethoate **Region 3**

Little Oso Flaco Creek

LOE ID:	54588
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47699, Dimethoate **Region 3**

Little Oso Flaco Creek

LOE ID:	54589
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**47700**	**Region 3**
Little Oso Flaco Creek		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47700, Disulfoton **Region 3**

Little Oso Flaco Creek

LOE ID:	54592
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47700, Disulfoton **Region 3**

Little Oso Flaco Creek

LOE ID:	54593
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**47324**	**Region 3**
Little Oso Flaco Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact-recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. One of 8 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 8 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47324, Escherichia coli (E. coli) **Region 3**

Little Oso Flaco Creek

LOE ID:	50423
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47701** **Region 3**

Little Oso Flaco Creek

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined in USEPA, 1985).This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47701, Ethoprop — Region 3

Little Oso Flaco Creek

LOE ID:	54597
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47701, Ethoprop **Region 3**

Little Oso Flaco Creek

LOE ID:	54594
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section

	F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47701, Ethoprop **Region 3**

Little Oso Flaco Creek

LOE ID:	54595
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47701, Ethoprop **Region 3**

Little Oso Flaco Creek

LOE ID:	54596
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **47703** **Region 3**

Little Oso Flaco Creek

Pollutant: **Malathion**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One of the five samples exceed the evaluation guideline for aquatic life uses (Palumbo, A.J., et al., 2012) and zero of the five samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 One of the five samples exceed the evaluation guidelines for aquatic life uses (Palumbo, A.J., et al., 2012) and zero of the five samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47703, Malathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54603
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47703, Malathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54602
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.

Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47703, Malathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54601
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47703, Malathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54600
Pollutant:	Malathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47703, Malathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54599
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47703, Malathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54598
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	47707	Region 3
Little Oso Flaco Creek		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (CDFW, 1992) and zero of the five samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47707, Methyl Parathion	**Region 3**
Little Oso Flaco Creek	

LOE ID:	54606
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47707, Methyl Parathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54609
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River

System

Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47707, Methyl Parathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54608
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47707, Methyl Parathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54605
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47707, Methyl Parathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54604
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47707, Methyl Parathion **Region 3**

Little Oso Flaco Creek

LOE ID:	54607
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1

Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **40983** **Region 3**

Little Oso Flaco Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Eleven of the 85 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and three of the 28 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 85 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and three of the 28 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	50392

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	50393
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality

	conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	50748
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	50747
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	48302
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 7 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	48303
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	48304
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 12 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	48305
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 12 of 36 samples

	exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	14375
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [

	312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	14376
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	14389
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 6 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	14390
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22

Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 6 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	13517
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	13481
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	13484
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	13482
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	13483
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	13501
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	13502
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40983, Oxygen, Dissolved **Region 3**

Little Oso Flaco Creek

LOE ID:	13503
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47708**	**Region 3**
Little Oso Flaco Creek		

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) and zero of the five samples exceed the evaluation guideline for drinking water (National health advisory level (NAS, 1977)). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47708, Phorate **Region 3**

Little Oso Flaco Creek

LOE ID:	54627
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47708, Phorate **Region 3**

Little Oso Flaco Creek

LOE ID:	54628
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47708, Phorate **Region 3**

Little Oso Flaco Creek

LOE ID:	54629
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47708, Phorate **Region 3**

Little Oso Flaco Creek

LOE ID:	54626
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47708, Phorate **Region 3**

Little Oso Flaco Creek

LOE ID:	54625
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47708, Phorate **Region 3**

Little Oso Flaco Creek

LOE ID:	54630
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [Little Oso Flaco Creek - 312OFN]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42164**	**Region 3**
Little Oso Flaco Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Seven of the 87 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 87 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42164, Temperature, water **Region 3**

Little Oso Flaco Creek

LOE ID:	50405
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42164, Temperature, water **Region 3**

Little Oso Flaco Creek

LOE ID:	14424

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 22 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42164, Temperature, water **Region 3**

Little Oso Flaco Creek

LOE ID:	13500
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42164, Temperature, water **Region 3**

Little Oso Flaco Creek

LOE ID:	13520
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42164, Temperature, water **Region 3**

Little Oso Flaco Creek

LOE ID:	48313
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	41995	Region 3
Little Oso Flaco Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 84 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and one of the 84 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 84 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and one of the 84 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41995, pH	**Region 3**
Little Oso Flaco Creek	

LOE ID:	48310
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	14407
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	14406
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	14391
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	14392
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	14393
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	10712
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	10711
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	11677
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	11678
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	11679
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	11696
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	11643
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	11680
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	11681
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	48309
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	48308
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	11644
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	48306
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	48307
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	50424
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	50421
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	50728
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	50394
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41995, pH **Region 3**

Little Oso Flaco Creek

LOE ID:	50749
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42123** **Region 3**

Little Oso Flaco Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five LOEs summarize turbidity data using the Evaluation Guideline applied to protect for Cold Freshwater Habitat uses (Sigler et al., 1984). However, this guideline is not relevant for Little Oso Flaco Creek because staff is not aware of any documentation of steelhead populations is the Oso Flaco Lake watershed. The publication Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S. and Reining, I.J, 2008) does not identify the Oso Flaco watershed as historic or potential steelhead trout habitat. Therefore, the use rating is set to insufficient information for these LOEs. This decision is based solely on the five LOEs which use the evaluation guideline for largemouth bass, a species that is found in the watershed. Thirty of the 81 samples exceed the evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity in Warm Fresh Water Habitats. Note, three LOEs were used in the previous assessment cycle and are removed from this decision

because they calculated exceedance counts the Cold Freshwater Habitat evaluation guideline (Sigler et al. 1984). The LOEs with the wrong evaluation guideline are numbers13499, 13519 and 14409. The data from those LOEs are summarized in LOEs 78981, 78982 and 78984 using the correct evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) for the Warm Freshwater Habitat use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty of the 81 samples exceed the evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity in Warm Fresh Water Habitatsand this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	13518
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]

Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	48311
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 18 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	14408
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 15 of 22 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	48312
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 17 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	13485
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 4/10/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	78982
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Ambient Monitoring Program - Santa Maria project data (CCAMP_SantaMaria) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 4/10/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	78981
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 22 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	78984
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Ambient Monitoring Program Dissolved Oxygen project data (CCAMP_DO) for Little Oso Flaco Creek to determine beneficial use support and results are as follows: Zero of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	50404
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42123, Turbidity **Region 3**

Little Oso Flaco Creek

LOE ID:	50764
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Oso Flaco Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Little Oso Flaco Creek was collected at 1 monitoring site [312OFN-Little Oso Flaco Creek at train Trussel]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Laguna Creek (San Benito County)**
Water Body ID: **CAR3055001520080604165438**
Water Body Type: **River & Stream**

DECISION ID **47632** **Region 3**
Laguna Creek (San Benito County)

Pollutant: **Alkalinity as CaCO3**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47632, Alkalinity as CaCO3 **Region 3**
Laguna Creek (San Benito County)

LOE ID: 54561

Pollutant: Alkalinity as CaCO3
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47632, Alkalinity as CaCO3 **Region 3**

Laguna Creek (San Benito County)

LOE ID:	54560
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1

	monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47641 Region 3

Laguna Creek (San Benito County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for unionized ammonia set to protect aquatic life nor did it exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47641, Ammonia Region 3

Laguna Creek (San Benito County)

LOE ID:	54564
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories (USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006)).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47641, Ammonia **Region 3**

Laguna Creek (San Benito County)

LOE ID:	54563
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47641, Ammonia **Region 3**

Laguna Creek (San Benito County)

LOE ID:	54562
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47642 **Region 3**

Laguna Creek (San Benito County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47642, Nitrate **Region 3**

Laguna Creek (San Benito County)

LOE ID:	54566
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47643	Region 3
Laguna Creek (San Benito County)		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47643, Nitrogen, Nitrite	**Region 3**
Laguna Creek (San Benito County)	

LOE ID:	54567
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47638 Region 3

Laguna Creek (San Benito County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed water quality objectives for Cold Freshwater, Warm Freshwater and Spawning Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the water quality objectives but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47638, Oxygen, Dissolved Region 3

Laguna Creek (San Benito County)

LOE ID:	54570
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47638, Oxygen, Dissolved **Region 3**

Laguna Creek (San Benito County)

LOE ID:	54568
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47634 Region 3

Laguna Creek (San Benito County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the water quality objective but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47634, Temperature, water Region 3

Laguna Creek (San Benito County)

LOE ID:	54559
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47639 Region 3

Laguna Creek (San Benito County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed water quality objectives for Drinking Water, Recreation, Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47639, pH **Region 3**

Laguna Creek (San Benito County)

LOE ID:	54572
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47639, pH **Region 3**

Laguna Creek (San Benito County)

LOE ID:	54571
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

criterion for pH.

Data Reference: Statewide Ref Condition Management Plan 2008

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation: Data was collected on a single day 7/16/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47639, pH **Region 3**

Laguna Creek (San Benito County)

LOE ID: 54575

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference: Statewide Ref Condition Management Plan 2008

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation: Data was collected on a single day 7/16/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47639, pH **Region 3**

Laguna Creek (San Benito County)

LOE ID: 54574

Pollutant: pH
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47639, pH **Region 3**

Laguna Creek (San Benito County)

LOE ID:	54573
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Laguna Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek (San Benito County) was collected at 1 monitoring site [Laguna Creek - 907SSDR11]
Temporal Representation:	Data was collected on a single day 7/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **La Brea Creek**
Water Body ID: **CAR3122006620080611171217**
Water Body Type: **River & Stream**

DECISION ID **41222** **Region 3**
La Brea Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 16 samples exceed the Basin Plan general water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 20 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 samples exceed the water quality objective for unionized ammonia and zero of the 20 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41222, Ammonia **Region 3**
La Brea Creek

LOE ID: 9593

Pollutant: Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41222, Ammonia **Region 3**

La Brea Creek

LOE ID:	9915
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41222, Ammonia **Region 3**

La Brea Creek

LOE ID:	9914
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-

	LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41222, Ammonia **Region 3**

La Brea Creek

LOE ID:	50357
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41222, Ammonia **Region 3**

La Brea Creek

LOE ID:	50410
Pollutant:	Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41222, Ammonia **Region 3**

La Brea Creek

LOE ID:	50383
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41278**	**Region 3**
La Brea Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 20 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41278, Chlorophyll-a — Region 3

La Brea Creek

LOE ID:	50358
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41278, Chlorophyll-a — Region 3

La Brea Creek

LOE ID:	50384
Pollutant:	Chlorophyll-a

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41278, Chlorophyll-a **Region 3**

La Brea Creek

LOE ID:	9912
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41278, Chlorophyll-a **Region 3**

La Brea Creek

LOE ID:	9899
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 15 samples

	exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47323**	**Region 3**
La Brea Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Two of five samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986)

set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 5 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47323, Escherichia coli (E. coli) **Region 3**

La Brea Creek

LOE ID:	50343
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41310	Region 3
La Brea Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. This use is fully supported. The most recent five samples (collected in between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Zero of the 5 nitrate samples exceeds the water quality objectives for Cold and Warm Freshwater Habitat beneficial uses. Zero of the 5 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat beneficial uses. Zero of the 5 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 20 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 5 nitrate samples exceeds the water quality objectives for Cold and Warm Freshwater Habitat beneficial uses. Zero of the 5 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Zero of the 5 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat beneficial uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41310, Nitrate	**Region 3**
La Brea Creek	

LOE ID:	50413
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41310, Nitrate **Region 3**

La Brea Creek

LOE ID:	50359
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41310, Nitrate **Region 3**

La Brea Creek

LOE ID:	50395
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41310, Nitrate **Region 3**

La Brea Creek

LOE ID:	50385
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41310, Nitrate **Region 3**

La Brea Creek

LOE ID:	50360
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41310, Nitrate **Region 3**

La Brea Creek

LOE ID:	50412

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41310, Nitrate **Region 3**

La Brea Creek

LOE ID:	9913
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41237**	**Region 3**
La Brea Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Three of the 21 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, one of the 21 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of the 21 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, one of the 21 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	13494
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	13480
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	13495
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	13496
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]

Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	13459
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	13460
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	13476
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	13461
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-

	LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	50373
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	50372
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID:	50396
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation: Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41237, Oxygen, Dissolved **Region 3**

La Brea Creek

LOE ID: 50397

Pollutant: Dissolved oxygen saturation
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference: Santa Maria Rotation field data 2007-2008

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation: Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41183 **Region 3**

La Brea Creek

Pollutant: Temperature, water

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Four of the 20 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 20 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41183, Temperature, water **Region 3**

La Brea Creek

LOE ID:	50409
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41183, Temperature, water **Region 3**

La Brea Creek

LOE ID:	13513
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41183, Temperature, water **Region 3**

La Brea Creek

LOE ID:	13479
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41354** **Region 3**

La Brea Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the evaluation guideline for cold freshwater habitat (Sigler et al. 1984) and the evaluation guideline for warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41354, Turbidity **Region 3**

La Brea Creek

LOE ID:	13477
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.

Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 4/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41354, Turbidity **Region 3**

La Brea Creek

LOE ID:	13497
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41354, Turbidity **Region 3**

La Brea Creek

LOE ID:	13498
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41354, Turbidity **Region 3**

La Brea Creek

LOE ID:	13478
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 4/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41354, Turbidity **Region 3**

La Brea Creek

LOE ID:	50399
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41354, Turbidity **Region 3**

La Brea Creek

LOE ID:	50375
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41313** **Region 3**

La Brea Creek

Pollutant: **pH**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. One of the 20 samples exceed the water quality objective for Cold and Warm Freshwater Habitats, and four of the 20 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 20 samples exceed the water quality objective for Cold and Warm Freshwater Habitats, and four of the 20 samples exceed the water quality objectives for Drinking Water and Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	50344
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	50374
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	50398

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	50346
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	50414
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11637

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11601
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11617
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]

Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11616
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11600

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11618
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11599
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11636
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11620
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41313, pH **Region 3**

La Brea Creek

LOE ID:	11619
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for La Brea Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither

	be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41281**	**Region 3**
La Brea Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Five of 19 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 2 of 19 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 19 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2013 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41281, Fecal Coliform **Region 3**

La Brea Creek

LOE ID:	11598
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41281, Fecal Coliform **Region 3**

La Brea Creek

LOE ID:	11597
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for La Brea Creek to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41281, Fecal Coliform **Region 3**

La Brea Creek

LOE ID:	50345
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41281, Fecal Coliform **Region 3**

La Brea Creek

LOE ID:	50342
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for La Brea Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for La Brea Creek was collected at 1 monitoring site [312BRE-LaBrea Creek us Sisquoc River]

Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Hot Springs Creek (Monterey County)**
Water Body ID: **CAR3080004020080605162725**
Water Body Type: **River & Stream**

DECISION ID **40529** **Region 3**
Hot Springs Creek (Monterey County)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40529, Escherichia coli (E. coli) **Region 3**
Hot Springs Creek (Monterey County)

LOE ID: 18484

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40529, Escherichia coli (E. coli) Region 3

Hot Springs Creek (Monterey County)

LOE ID:	18483
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40501 **Region 3**

Hot Springs Creek (Monterey County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objective for Municipal and Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40501, Nitrate **Region 3**

Hot Springs Creek (Monterey County)

LOE ID:	18263
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40484 Region 3

Hot Springs Creek (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. One of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, zero of the 4 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, zero of the 4 samples exceeded the water quality objective for dissolved oxygen in Warm

Freshwater Habitats. This does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40484, Oxygen, Dissolved **Region 3**

Hot Springs Creek (Monterey County)

LOE ID:	17982
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40484, Oxygen, Dissolved **Region 3**

Hot Springs Creek (Monterey County)

LOE ID:	17981
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40485 Region 3

Hot Springs Creek (Monterey County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40485, Temperature, water **Region 3**

Hot Springs Creek (Monterey County)

LOE ID:	18562
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40528 **Region 3**

Hot Springs Creek (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Cold or Warm Freshwater Habitat water quality objective, the Municipal & Domestic Supply objective, the Non-Contact Recreation objective or the Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Cold or Warm Freshwater Habitat water quality objective, the Municipal & Domestic Supply objective, the Non-Contact Recreation objective or the Water Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40528, pH **Region 3**

Hot Springs Creek (Monterey County)

LOE ID:	18850
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-

	HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40528, pH **Region 3**

Hot Springs Creek (Monterey County)

LOE ID:	18851
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40528, pH **Region 3**

Hot Springs Creek (Monterey County)

LOE ID:	18571
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40528, pH **Region 3**

Hot Springs Creek (Monterey County)

LOE ID:	18570
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40528, pH **Region 3**

Hot Springs Creek (Monterey County)

LOE ID:	18572
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Hot Springs Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hot Springs Creek was collected at 1 monitoring site [308-HOTSP-31 - Hot Springs Creek at Esalen]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Harkins Slough**
Water Body ID: **CAR3051001320080603122917**
Water Body Type: **River & Stream**

DECISION ID	41851	Region 3
Harkins Slough		

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Watsonville Slough Pathogen
TMDL Project Code:	35
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

A TMDL has been approved by USEPA for pathogens in Watsonville Slough and four of its tributaries (specifically, Harkins Slough). Harkins Slough was not specifically identified on the 2006 Section 303(d) list for this pollutant but was included in the TMDL because it is impaired and the source controls are overlapping.

This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. Four LOEs summarize fecal coliform data in which 35 of the 55 samples exceed the water quality objective for contact recreation (i.e. swimming) and 12 of the 55 samples exceed the water quality objective for non-contact recreation. Eight LOEs summarize E. coli data in which 45 of the 70 samples exceed the USEPA Ambient Water Quality Criteria for Bacteria (1986) for contact recreation (i.e. swimming) and 11 of the 70 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-five of the 55 samples exceed the water quality objective for contact recreation and 45 of the 70 samples exceed the USEPA Ambient Water Quality Criteria for Bacteria (1986) for contact recreation. Each of these exceeds the allowable frequency in Table 4.2 of the Listing Policy.
4. The Watsonville Slough Pathogen TMDL has been approved by USEPA on July 19, 2007.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	13657
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	25
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Harkins Slough to determine beneficial use support and results are as follows: 25 of 41 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 7 monitoring sites [Confluence with Watsonville Slough, Harkins Slough Rd, ~10 m upstream of Ranport Rd crossing, Upstream of Highway 1, Buena Vista RD, Peaceful Oaks, Drivway number 916 off Larken Valley Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	13658
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	4

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Harkins Slough to determine beneficial use support and results are as follows: 4 of 41 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 7 monitoring sites [Confluence with Watsonville Slough, Harkins Slough Rd, ~10 m upstream of Ranport Rd crossing, Upstream of Highway 1, Buena Vista RD, Peaceful Oaks, Drivway number 916 off Larken Valley Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	13794
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Harkins Slough to determine beneficial use support and results are as follows: 8 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 7 monitoring sites [Confluence with Watsonville Slough, ~10 m upstream of Ranport Rd crossing, Upstream of Highway 1, Buena Vista RD, Harkins Slough Rd, Drivway number 916 off Larken Valley Rd, Peaceful Oaks]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	13793
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	25
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Harkins Slough to determine beneficial use support and results are as follows: 25 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 7 monitoring sites [Confluence with Watsonville Slough, ~10 m upstream of Ranport Rd crossing, Upstream of Highway 1, Buena Vista RD, Harkins Slough Rd, Drivway number 916 off Larken Valley Rd, Peaceful Oaks]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	10336
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	10333
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 10 of 14 samples

	exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	10334
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 4 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	18348
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [305-HARKI-23 - Harkins Slough at Buena Vista Drive, 305-HARKI-22 - Harkins Slough at Pajaro Valley Water Management Assn. Pump Station, 305-HARKI-21 - Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	18437
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Harkins Slough to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305-HARKI-21 - Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	10337
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 4 of 14 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	18347
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Harkins Slough to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [305-HARKI-23 - Harkins Slough at Buena Vista Drive, 305-HARKI-22 - Harkins Slough at Pajaro Valley Water Management Assn. Pump Station, 305-HARKI-21 - Harkins Slough at Harkins

	Slough Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41851, Indicator Bacteria **Region 3**

Harkins Slough

LOE ID:	18436
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Harkins Slough to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305-HARKI-21 - Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40510** **Region 3**

Harkins Slough

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data are assessed.

Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the Basin Plan general water quality objective for unionized ammonia set to protect aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the Basin Plan general water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40510, Ammonia **Region 3**

Harkins Slough

LOE ID:	9175
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40702 Region 3

Harkins Slough

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of two water samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use two of the water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two water samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40702, Chlorpyrifos Region 3

Harkins Slough

LOE ID:	16108

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40702, Chlorpyrifos **Region 3**

Harkins Slough

LOE ID:	18659
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [DHS014 - Harkin Slough upstream of the pumping station]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID	**40703**	**Region 3**
Harkins Slough		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 4 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40703, Diazinon **Region 3**

Harkins Slough

LOE ID:	16701
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40703, Diazinon — Region 3

Harkins Slough

LOE ID:	18753
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [DHS014 - Harkin Slough upstream of the pumping station]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 42636 — Region 3

Harkins Slough

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed..

Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Three LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in water samples. Zero of the two water samples resulted in a significant toxic effect to one or more test organisms.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two water samples resulted in a significant toxic effect to one or more test organisms to protect aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42636, Toxicity **Region 3**

Harkins Slough

LOE ID:	24103
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42636, Toxicity **Region 3**

Harkins Slough

LOE ID:	24105
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42636, Toxicity **Region 3**

Harkins Slough

LOE ID:	24106
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40579 Region 3

Harkins Slough

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of the 45 samples exceed the water quality objective for Warm Freshwater Habitat. However, at this time staff are unaware of any documentation of steelhead populations in Harkins Slough. Therefore this Evaluation Guideline is not relevant for this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Staff are unaware of any documentation of steelhead populations in Harkins Slough. Therefore this Evaluation Guideline is not relevant for this waterbody. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40579, Turbidity Region 3

Harkins Slough

LOE ID:	13717
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Harkins Slough to determine beneficial use support and results are as follows: 17 of 37 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [Confluence with Watsonville Slough, ~10 m upstream of Ranport Rd crossing, Harkins Slough Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/16/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40579, Turbidity **Region 3**

Harkins Slough

LOE ID:	11980
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 7/21/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40578 Region 3

Harkins Slough

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six samples exceed the Warm Freshwater Habitat water quality objective and 4 samples exceed the numeric objectives for Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six samples exceed the Warm Freshwater Habitat water quality objective and 4 samples exceed the numeric objectives for Non-Contact Recreation and Water Contact Recreation and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40578, pH Region 3

Harkins Slough

LOE ID:	18908
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Harkins Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [305-HARKI-23 - Harkins Slough at Buena Vista Drive, 305-HARKI-22 - Harkins Slough at Pajaro Valley Water Management Assn. Pump Station, 305-HARKI-21 - Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	18907
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Harkins Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [305-HARKI-23 - Harkins Slough at Buena Vista Drive, 305-HARKI-22 - Harkins Slough at Pajaro Valley Water Management Assn. Pump Station, 305-HARKI-21 - Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	18906
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Harkins Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [305-HARKI-23 - Harkins Slough at Buena Vista Drive, 305-HARKI-22 - Harkins Slough at Pajaro Valley Water Management Assn. Pump Station, 305-HARKI-21 - Harkins Slough at Harkins Slough Road]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	10353
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	19153
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Harkins Slough to determine beneficial use support and results are as follows: 1 of 21 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 2 monitoring sites [305-HARKI-21 - Harkins Slough at Harkins Slough Road, 305-HARKI-22 - Harkins Slough at Pajaro Valley Water Management Assn. Pump Station]
Temporal Representation:	Data was collected over the time period 5/13/2004-11/12/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	13644
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Harkins Slough to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [Confluence with Watsonville Slough, Harkins Slough Rd, ~10 m upstream of Ranport Rd crossing]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/16/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	13643
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [Confluence with Watsonville Slough, Harkins Slough Rd, ~10 m upstream of Ranport Rd crossing]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/16/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	13642
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Harkins Slough to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [Confluence with Watsonville Slough, Harkins Slough Rd, ~10 m upstream of Ranport Rd crossing]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/16/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	10354
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	19135
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Harkins Slough to determine beneficial use support and results are as follows: 1 of 21 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 2 monitoring sites [305-HARKI-21 - Harkins Slough at Harkins Slough Road, 305-HARKI-22 - Harkins Slough at Pajaro Valley Water Management Assn. Pump Station]
Temporal Representation:	Data was collected over the time period 5/13/2004-11/12/2004.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	19136
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	21
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Harkins Slough to determine beneficial use support and results are as follows: 1 of 21 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 2 monitoring sites [305-HARKI-21 - Harkins Slough at Harkins Slough Road, 305-HARKI-22 - Harkins Slough at Pajaro Valley Water Management Assn. Pump Station]
Temporal Representation:	Data was collected over the time period 5/13/2004-11/12/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40578, pH **Region 3**

Harkins Slough

LOE ID:	10355
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40701	Region 3
Harkins Slough		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Eight of the 14 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. In addition to elevated chlorophyll a measurements from Harking Slough, CCAMP staff documented

green and yellow-green water color as well as suspended algae in the water column. This decision to list for chlorophyll a (as evidence of impairment of the Biostimulatory Substances General Objective) is supported by the Decision for low Dissolved Oxygen (Decision # 14399). CCAMP staff also documented depressed dissolved oxygen concentrations in this waterbody.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 14 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40701, Chlorophyll-a **Region 3**

Harkins Slough

LOE ID:	9176
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 8 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road].
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40650**	**Region 3**
Harkins Slough		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 45 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty of the 45 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40650, Oxygen, Dissolved — Region 3

Harkins Slough

LOE ID:	18018
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Harkins Slough to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 3 monitoring sites [305-HARKI-23 - Harkins Slough at Buena Vista Drive, 305-HARKI-22 - Harkins Slough at Pajaro Valley Water Management Assn. Pump Station, 305-HARKI-21 - Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40650, Oxygen, Dissolved — Region 3

Harkins Slough

LOE ID:	11979
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14

Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 9 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40650, Oxygen, Dissolved **Region 3**

Harkins Slough

LOE ID:	18250
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Harkins Slough to determine beneficial use support and results are as follows: 14 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305-HARKI-21 - Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 6/5/2004-11/12/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40650, Oxygen, Dissolved **Region 3**

Harkins Slough

LOE ID:	11978
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Harkins Slough to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Harkins Slough was collected at 1 monitoring site [305HAR-Harkins Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Hanson Slough**
Water Body ID: **CAR3051003020080616145237**
Water Body Type: **River & Stream**

DECISION ID **40811** **Region 3**
Hanson Slough

Pollutant: **Turbidity**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. All of the 3 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All of the 3 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40811, Turbidity **Region 3**
Hanson Slough

LOE ID: 13736

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Hanson Slough to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Hanson Slough was collected at 1 monitoring site [Harkins Slough Rd.]
Temporal Representation:	Data was collected over the time period 2/27/2003-4/13/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**40854**	**Region 3**
Hanson Slough		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample exceeds the water quality objectives for Water Contact Recreation and Non-Contact Recreation, but does not exceed the objective for Warm Freshwater Habitat. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceeds the water quality objectives for Water Contact Recreation and Non-Contact Recreation, but does not exceed the objective for Warm Freshwater Habitat. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40854, pH — Region 3

Hanson Slough

LOE ID:	13665
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Hanson Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hanson Slough was collected at 1 monitoring site [Harkins Slough Rd.]
Temporal Representation:	Data was collected on a single day 2/27/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40854, pH — Region 3

Hanson Slough

LOE ID:	13664
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Hanson Slough to determine beneficial use support and results are

	as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hanson Slough was collected at 1 monitoring site [Harkins Slough Rd.]
Temporal Representation:	Data was collected on a single day 2/27/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40854, pH **Region 3**

Hanson Slough

LOE ID:	13680
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Hanson Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hanson Slough was collected at 1 monitoring site [Harkins Slough Rd.]
Temporal Representation:	Data was collected on a single day 2/27/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID **42537** **Region 3**

Hanson Slough

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Source Unknown
TMDL Name:	Watsonville Slough Pathogen
TMDL Project Code:	35
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

A TMDL has been approved by USEPA for pathogens in Watsonville Slough and four of its tributaries (specifically, Hanson Slough). Hanson Slough was not specifically identified on the 2006 Section 303(d) list for this pollutant but was included in the TMDL because it is impaired and the source controls are overlapping.

This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The single E. coli sample exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. In addition, the single Fecal Coliform sample exceed the water quality objective for Water Contact Recreation. However, a minimum of 26 samples is necessary to determine if water quality standards are met, in this case there are insufficient number of samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. There are not enough samples to determine if the allowable frequency calculated from the equation in Table 4.2 of the Listing Policy is exceeded.
4. The Watsonville Slough Pathogen TMDL has been approved by USEPA on July 19, 2007.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42537, Indicator Bacteria **Region 3**

Hanson Slough

LOE ID:	13812
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Hanson Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hanson Slough was collected at 1 monitoring site [Harkins Slough Rd.]
Temporal Representation:	Data was collected on a single day 2/27/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42537, Indicator Bacteria **Region 3**

Hanson Slough

LOE ID:	13694
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Hanson Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water

	Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hanson Slough was collected at 1 monitoring site [Harkins Slough Rd.]
Temporal Representation:	Data was collected on a single day 2/27/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42537, Indicator Bacteria **Region 3**

Hanson Slough

LOE ID:	13693
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Hanson Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Hanson Slough was collected at 1 monitoring site [Harkins Slough Rd.]
Temporal Representation:	Data was collected on a single day 2/27/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42537, Indicator Bacteria **Region 3**

Hanson Slough

LOE ID:	13797
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Hanson Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Hanson Slough was collected at 1 monitoring site [Harkins Slough Rd.]
Temporal Representation:	Data was collected on a single day 2/27/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Greene Valley Creek (Santa Barbara County)**
Water Body ID: **CAR3121003020080611165954**
Water Body Type: **River & Stream**

DECISION ID **40363** **Region 3**
Greene Valley Creek (Santa Barbara County)

Pollutant: **Temperature, water**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 74 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of the 74 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40363, Temperature, water **Region 3**
Greene Valley Creek (Santa Barbara County)

LOE ID: 14276

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 23 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40363, Temperature, water **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48544
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40363, Temperature, water **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50537
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40430 **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Thirty of the 74 samples exceed the evaluation guideline for cold freshwater habitat (Sigler et al. 1984) and 27 of the 74 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty of the 74 samples exceed the evaluation guideline for cold freshwater habitat and 27 of the 74 samples exceed the warm freshwater habitat evaluation guideline. Both of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40430, Turbidity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50522
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40430, Turbidity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50299
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40430, Turbidity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14275
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40430, Turbidity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14274
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40430, Turbidity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48543
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	12

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40430, Turbidity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48542
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 14 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **39669** **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess pollutant. Six LOEs summarize unionized ammonia data in which 16 of the 63 samples exceed the Basin Plan general water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and 2 of the 77 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. However, There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixteen of the 63 samples exceed the water quality objective for unionized ammonia and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Nutrients TMDL was been approved by USEPA on March 8th, 2016.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. This water body pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed

and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 39669, Ammonia **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50292
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39669, Ammonia **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50500
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39669, Ammonia **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50538
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39669, Ammonia **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14238
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39669, Ammonia — Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	48441
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 4/10/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39669, Ammonia — Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	48440
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 42 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39669, Ammonia **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14454
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 9 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39669, Ammonia **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14455
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 9 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39669, Ammonia **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48457
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 4/10/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **39624** **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by	08/31/2015

USEPA:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Five of the five samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Zero of six samples exceeded the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). Additionally, six samples (quantified as either non-detect or detected but not quantified) were collected but are not included in this assessment because each result was either non-detect or detected but not quantified and the laboratory reporting limit was above the guideline. For the municipal and domestic supply beneficial use and sediment samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the five samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by the USEPA on August 31, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48460
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	15236
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48472
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	15235
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54392
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek. One sample was collected but is not included in this assessment because the result was "detected but not quantified" meaning that the parameter is measured but below the reporting limit and the laboratory reporting limit was above the guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy to be assessed as an exceedance of the criteria. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos — Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54393
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek. One sample was collected but is not included in this assessment because the result was "detected but not quantified" meaning that the parameter is measured but below the reporting limit and the laboratory reporting limit was above the guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy to be assessed as an exceedance of the criteria. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos — Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54368
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54369
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54379
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: None of the samples exceed the criterion for Chlorpyrifos. Six samples (quantified as either non-detect or detected but not quantified) were collected but are not included in this assessment because each result was either non-detect or detected but not quantified and the laboratory reporting limit was above the guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54380
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: None of the samples exceed the criterion for Chlorpyrifos. Six samples (quantified as either non-detect or detected but not quantified) were collected but are not included in this assessment because each result was either non-detect or detected but not quantified and the laboratory reporting limit was above the guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54381
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39624, Chlorpyrifos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54382
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 39643 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. Twenty-nine of the 29 nitrate samples and 69 of the 70 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Twenty-nine of the 29 nitrate samples and 51 of the 51 nitrate/nitrite samples evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 1.20 mg/L to 21.31 mg/L, exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Floating mats ranged from 0 to 90% cover, exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration ranged from 4.17 to 23.3 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 5.59 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 134 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60

grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 335 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-nine of the 29 nitrate samples and 69 of the 70 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Twenty-nine of the 29 nitrate samples and 51 of the 51 nitrate/nitrite samples evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment..
4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on 03/08/2016.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50295
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50502
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50518
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50540
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50541
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek

	(Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50294
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory

	Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	27865
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	27864
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48504
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48503
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	39
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 38 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48502
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48488
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected

	at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48487
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48486
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14484
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 19 of 19 samples exceed the

	criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39643, Nitrate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14338
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39642** **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 71 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. Four of the 71 samples exceed the water quality objective for Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Twenty-eight of the 71 samples are below 85% saturation, but the median of the data does not exceed (fall below) the Objective. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty of the 71 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on March 8, 2016.

5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

This water body pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48506
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14725
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 23 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14244
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 14 of 23 samples exceed the

	criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14470
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 14 of 23 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48521
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48522
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48505
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14726
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50296
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50520
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50519
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39642, Oxygen, Dissolved **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50297
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42640 **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture

TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under section 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Eight LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and four additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, six total samples are available to assess toxic effects in sediment samples. Four of the six sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Twelve LOEs summarize water samples. Six water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-two total samples are available to assess toxic effects in water samples. Sixteen of the twenty-two water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 6 sediment samples and 16 of the 22 water samples exceed the water quality objective for aquatic life protection and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on August 31, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID: 78937

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests for the samples included survival and growth of Hyalella azteca. The samples exhibited significant toxicity to survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312GVS - Green Valley Creek at Simas.
Temporal Representation:	The samples were collected in April 2007, 2008, and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	78938
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. No significant toxicity was reported for this sample. The toxicity tests included survival and growth of Hyalella azteca.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Greene Valley Creek (Santa Barbara County) station 312GVS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54435
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests for the samples included survival and growth of Hyalella azteca. The samples exhibited significant toxicity to survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312GVS - Green Valley Creek at Simas.
Temporal Representation:	The samples were collected in April 2007, 2008, and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54434
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Ten samples were collected to evaluate water toxicity. Ten of the 10 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth, Selenastrum capricornutum growth and Hyalella azteca growth. The ten samples exhibited significant toxicity to Ceriodaphnia dubia reproduction (9/24/08, 1/24/08, 3/27/08, 10/25/07, 1/27/09, 2/7/09, 8/20/09, 9/17/09, 1/20/10, 3/30/10)Ceriodaphnia dubia survival (9/24/2008, 2/7/2009, 1/20/2010, 3/30/2010, 10/25/2007, 1/24/2008, 3/27/2008)Pimephales promelas growth (3/30/10) and Selenastrum capricornutum growth (9/17/09, 10/27/07, 3/27/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312GVS - Green Valley Creek at Simas.
Temporal Representation:	The samples were collected quarterly from February 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54425
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. One of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in teh sample collected on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 312GVS - Green Valley Creek at Simas Rd.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory.Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54424
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. No significant toxicity was reported for this sample. The toxicity tests included survival and growth of Hyalella azteca.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	

Spatial Representation:	The samples were collected at Greene Valley Creek (Santa Barbara County) station 312GVS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24090
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24085
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24097
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24081
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 3/22/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24091

Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24099
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24096
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24084
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24093
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP

	(2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected on a single day 4/20/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24101
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24100
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24080
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas].
Temporal Representation:	Data was collected over the time period 3/22/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24092
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected on a single day 4/20/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42640, Toxicity **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	24098
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and

	cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47374 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life uses (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47374, Azinphos-methyl (Guthion) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54498
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47374, Azinphos-methyl (Guthion) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54497
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47486 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut et al. 2012) nor did the single sediment sample exceed the Evaluation Guideline (Amweg et al., 2005) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47486, Bifenthrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54343
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47486, Bifenthrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54342
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47486, Bifenthrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54341
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47486, Bifenthrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54344
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47363 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47363, Chlordane Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54354
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47363, Chlordane **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54353
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40451 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 69 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 69 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40451, Chlorophyll-a Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	50293
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40451, Chlorophyll-a **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50501
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40451, Chlorophyll-a **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48459
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40451, Chlorophyll-a **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48458
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40451, Chlorophyll-a **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14468
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40451, Chlorophyll-a **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14469
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]

Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47487 **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut et al. 2012) nor did the single sediment sample exceed the Evaluation Guideline (Amweg et al., 2005) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47487, Cyfluthrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54402
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47487, Cyfluthrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54403
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47487, Cyfluthrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54404
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average

	guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47487, Cyfluthrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54394
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47488 **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut et al. 2012) nor did the single sediment sample exceed the Evaluation Guideline (Amweg et al., 2005) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47488, Cyhalothrin, Lambda **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54413
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47488, Cyhalothrin, Lambda **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54414
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).

Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47488, Cyhalothrin, Lambda **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54415
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47488, Cyhalothrin, Lambda **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54416
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47490 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut et al. 2012) used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. The single water sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47490, Cypermethrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54429
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47490, Cypermethrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54428
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47490, Cypermethrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54426
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47490, Cypermethrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54427
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47364 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline for DDD(MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample was also tested for toxic effects to and invertebrate test organism and but did not result in a significant reduction in survival or growth of the test organism. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47364, DDD (Dichlorodiphenyldichloroethane) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54439
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47364, DDD (Dichlorodiphenyldichloroethane) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54424
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. No significant toxicity was reported for this sample. The toxicity tests included survival and growth of Hyalella azteca.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Greene Valley Creek (Santa Barbara County) station 312GVS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47364, DDD (Dichlorodiphenyldichloroethane) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54438
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47365 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline for DDE(MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample was also tested for toxic effects to and invertebrate test organism and but did not result in a significant reduction in survival or growth of the test organism. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47365, DDE (Dichlorodiphenyldichloroethylene) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54424
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. No significant toxicity was reported for this sample. The toxicity tests included survival and growth of Hyalella azteca.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Greene Valley Creek (Santa Barbara County) station 312GVS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47365, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54440
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47365, DDE (Dichlorodiphenyldichloroethylene) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54441
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47366 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guidelines (MacDonald et al. 2000) for DDT or for Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) which are used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47366, DDT (Dichlorodiphenyltrichloroethane) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54422
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47366, DDT (Dichlorodiphenyltrichloroethane) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54447
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47366, DDT (Dichlorodiphenyltrichloroethane) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54412
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47366, DDT (Dichlorodiphenyltrichloroethane) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54446
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47489 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to

assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (maximum acceptable toxicant concentration, USEPA Office of Pesticide Programs) nor did the single sediment sample exceed the evaluation guideline (Amweg et al., 2005) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47489, Deltamethrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54455
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47489, Deltamethrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54449
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47489, Deltamethrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54454
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47489, Deltamethrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54448
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47375 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the evaluation guideline for aquatic life uses (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Zero of the 6 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47375, Demeton **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54461
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47375, Demeton **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54456
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47375, Demeton **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54464
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47375, Demeton **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54463
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection

	Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47375, Demeton **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54462
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47375, Demeton **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54460
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39639 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Twelve lines of evidence are available in the administrative record to assess this pollutant. Zero of the eleven samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the nine samples exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no

diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54487
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not

	be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54473
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54478
Pollutant:	Diazinon

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54479
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54480
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54481
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54469
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1

samples exceed the criterion for Diazinon.

Data Reference: Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline: The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).

Guideline Reference: Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.

Spatial Representation: Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]

Temporal Representation: Data was collected on a single day 6/10/2009.

Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information: The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID: 54470

Pollutant: Diazinon

LOE Subgroup: Pollutant-Sediment

Matrix: Sediment

Fraction: Total

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.

Data Reference: Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline: The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g

	and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48474
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	15250
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	15237
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39639, Diazinon **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48473
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek

	(Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon, Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47376 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the evaluation guideline for aquatic life uses maximum acceptable toxicant concentration (USEPA Office of Pesticide Programs, 2011). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the 6 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47376, Dichlorvos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54500
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47376, Dichlorvos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54488
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47376, Dichlorvos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54489
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara

	County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47376, Dichlorvos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54490
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47376, Dichlorvos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54501
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss.

	Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47376, Dichlorvos **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54499
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47370 **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47370, Dieldrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54336
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47370, Dieldrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54335
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47377 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (USEPA Office of Pesticide Programs, 2011)) and the evaluation guideline for drinking water (California Department of Health Services notification level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the 6 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47377, Dimethoate Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54337
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47377, Dimethoate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54395
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47377, Dimethoate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54417
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47377, Dimethoate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54396
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47377, Dimethoate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54405
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47377, Dimethoate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54406
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47377, Dimethoate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54407
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47377, Dimethoate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54408
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47377, Dimethoate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54397
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47378 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the 6 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47378, Disulfoton **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54420
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47378, Disulfoton **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54421
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47378, Disulfoton **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54430
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47367 **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47367, Endrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54432
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47367, Endrin **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54431
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47321 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for E.coli is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Four of the 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation:	pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47321, Escherichia coli (E. coli) **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50557
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47493 **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to

assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.
Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (maximum acceptable toxicant concentration, USEPA Office of Pesticide Programs) nor did the single sediment sample exceed the evaluation guideline (Amweg et al., 2005) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47493, Esfenvalerate/Fenvalerate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54433
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47493, Esfenvalerate/Fenvalerate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54442
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47493, Esfenvalerate/Fenvalerate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54443
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47493, Esfenvalerate/Fenvalerate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54450
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara

	County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**47379**	**Region 3**
Greene Valley Creek (Santa Barbara County)		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined in USEPA, 1985). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the 6 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47379, Ethoprop **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54451
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47379, Ethoprop **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54452
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47379, Ethoprop **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54457
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47379, Ethoprop **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54453
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47379, Ethoprop **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54458
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and

	NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47379, Ethoprop **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54459
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47320	Region 3
Greene Valley Creek (Santa Barbara County)		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 12 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of the 12 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 12 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of the 12 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47320, Fecal Coliform	**Region 3**
Greene Valley Creek (Santa Barbara County)	

LOE ID:	50556
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Coliform, Fecal.

Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47320, Fecal Coliform **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50559
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected

	at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47368 **Region 3**

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47368, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54465
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47368, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54466
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47372 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47372, Methidathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54485
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47372, Methidathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54492
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47372, Methidathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54491
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47494 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the six water samples exceed the evaluation guideline (Menconi, M., et al., 1992) nor did the single sediment sample exceed the evaluation guideline (Ding et al., 2011) both used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54357
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54358
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54345
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54346
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54340
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54339
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54347
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples

	exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54338
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54348
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54494
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47494, Methyl Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54493
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47369 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47369, PCBs (Polychlorinated biphenyls) Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54387
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47369, PCBs (Polychlorinated biphenyls) **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54386
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47373 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life uses (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47373, Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54384
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47373, Parathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54385
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47382 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut et al. 2012) nor did the single sediment sample exceed the Evaluation Guideline (Amweg et al., 2005) both used to interpret the narrative water quality objective for aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47382, Permethrin, total **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54351
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47382, Permethrin, total **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54349
Pollutant:	Permethrin, total

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47382, Permethrin, total **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54352
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates,

	such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47382, Permethrin, total **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54350
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9

	ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47381 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 Zero of the 6 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47381, Phorate Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	54389
Pollutant:	Phorate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47381, Phorate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54388
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47381, Phorate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54390
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47381, Phorate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54398
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47381, Phorate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54375
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the

	criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47381, Phorate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54376
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47381, Phorate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54377
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47381, Phorate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54378
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47381, Phorate **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54391
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47371 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47371, Phosmet **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54400
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47371, Phosmet **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54399
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47371, Phosmet **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54401
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40431 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 71 samples exceed the water quality objectives for Drinking Water, Recreation, Warm and Cold Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 71 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40431, pH Region 3

Greene Valley Creek (Santa Barbara County)

LOE ID:	50291
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50521
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50558
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50555
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	50298
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48541
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14260
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14259
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14258
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected

	at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14245
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48523
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48524
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48525
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	48526
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40431, pH **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	14261
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [312GVS - Green Valley Creek at Simas]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47380 Region 3

Greene Valley Creek (Santa Barbara County)

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Two of the 6 samples exceed the evaluation guideline for aquatic life uses (Palumbo, A.J., et al., 2012) but zero of the 6 sample exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 Two of the 6 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47380, Malathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54483
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47380, Malathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54467

Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47380, Malathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54468
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47380, Malathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54484
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47380, Malathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54482
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47380, Malathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54477
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47380, Malathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54476
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Malathion.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47380, Malathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54475
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47380, Malathion **Region 3**

Greene Valley Creek (Santa Barbara County)

LOE ID:	54474
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Greene Valley Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Greene Valley Creek (Santa Barbara County) was collected at 1 monitoring site [Green Valley Ck. at Simas - 312GVS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Graves Creek**
Water Body ID: **CAR3098112620080605171216**
Water Body Type: **River & Stream**

DECISION ID **40827** **Region 3**
Graves Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. One of the 3 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. One of the 3 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40827, Escherichia coli (E. coli) **Region 3**
Graves Creek

LOE ID: 18456

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3

Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40827, Escherichia coli (E. coli) **Region 3**

Graves Creek

LOE ID:	18471
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40896 Region 3

Graves Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Non-Contact Recreation objective. It does exceed the water quality objective for Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Non-Contact Recreation objective. It does exceed the water quality objective for Water Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40896, Fecal Coliform Region 3

Graves Creek

LOE ID:	17659
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and

	results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40896, Fecal Coliform **Region 3**

Graves Creek

LOE ID:	17658
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-

	GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40911 Region 3

Graves Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40911, Nitrate Region 3

Graves Creek

LOE ID:	18359
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**42449**	**Region 3**
Graves Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the water quality objectives for dissolved oxygen in Warm and Cold Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of the 4 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42449, Oxygen, Dissolved **Region 3**

Graves Creek

LOE ID:	18096
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42449, Oxygen, Dissolved **Region 3**

Graves Creek

LOE ID:	18097
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40840**	**Region 3**
Graves Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40840, Temperature, water **Region 3**

Graves Creek

LOE ID:	18817
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40785** **Region 3**

Graves Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply, Non-Contact Recreation, or Water Contact Recreation. Two of the 3 samples exceed the water quality objectives for Warm and Cold Freshwater Habitat. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply, Non-Contact Recreation, or Water Contact Recreation. Two of the 3 samples exceed the water quality objectives for Warm and Cold Freshwater Habitat. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40785, pH **Region 3**

Graves Creek

LOE ID:	19030
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40785, pH **Region 3**

Graves Creek

LOE ID:	19047
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40785, pH **Region 3**

Graves Creek

LOE ID:	19048
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40785, pH **Region 3**

Graves Creek

LOE ID:	19029
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40785, pH **Region 3**

Graves Creek

LOE ID:	19028
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Graves Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Graves Creek was collected at 1 monitoring site [309-GRAVE-41 - Graves Creek at Monterey Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Gallighan Slough**
Water Body ID: **CAR3051003020080616145053**
Water Body Type: **River & Stream**

DECISION ID **40592** **Region 3**
Gallighan Slough

Pollutant: **Total Coliform**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: The shellfish beneficial use no longer applies to this water segment.

The Central Coast Water Board approved resolution 2006-0025 on March 24, 2006 amending the Water Quality Control Plan for the Central Coast Basin to remove the Shellfish Harvesting beneficial use from Watsonville Slough and tributaries. This was approved by the California Office of Administrative Law on November 20, 2006 and was approved by the USEPA on July 19, 2007.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40592, Total Coliform **Region 3**
Gallighan Slough

LOE ID: 13829

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 9
Number of Exceedances: 8

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gallighan Slough to determine beneficial use support and results are as follows: 8 of 9 samples exceed the criterion for Coliform, Total.
Data Reference: Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12))

	states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gallighan Slough was collected at 1 monitoring site [Buena Vista Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-11/18/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**40800**	**Region 3**
Gallighan Slough		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Nine of 12 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This supports rejection of the null hypothesis. However, at this time staff are unaware of any documentation of steelhead populations in Gallighan Slough. Therefore this Evaluation Guideline is not relevant for this waterbody. Based on the readily available data and information, there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. At this time staff are unaware of any documentation of steelhead populations in Gallighan Slough. Therefore this Evaluation Guideline is not relevant for this waterbody. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40800, Turbidity — Region 3

Gallighan Slough

LOE ID:	13733
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gallighan Slough to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Gallighan Slough was collected at 1 monitoring site [Buena Vista Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/1/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID 40693 — Region 3

Gallighan Slough

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. None of the 8 samples exceed the water quality objective for Water Contact Recreation, Non-Contact Recreation, and Warm Freshwater Habitat.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 8 samples exceed the water quality objective for Water Contact Recreation, Non-Contact Recreation, and Warm Freshwater Habitat and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40693, pH **Region 3**

Gallighan Slough

LOE ID:	13645
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gallighan Slough to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gallighan Slough was collected at 1 monitoring site [Buena Vista Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/1/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance

measurements are not consistently documented in this data set.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40693, pH **Region 3**

Gallighan Slough

LOE ID:	13646
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gallighan Slough to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gallighan Slough was collected at 1 monitoring site [Buena Vista Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/1/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40693, pH **Region 3**

Gallighan Slough

LOE ID:	13660
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gallighan Slough to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gallighan Slough was collected at 1 monitoring site [Buena Vista Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-7/1/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**42627**	**Region 3**
Gallighan Slough		

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Source Unknown
TMDL Name:	Watsonville Slough Pathogen
TMDL Project Code:	35
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note the pollutant name has been changed from Pathogens to Indicator Bacteria A TMDL has been approved by USEPA (July 19, 2007) for pathogens in Watsonville Slough and four of its tributaries (specifically Gallighan Slough). This pollutant is being considered for placement on the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 9 samples, tested for E. coli) and 3 of the 9 samples, tested for Fecal Coliform, exceed the water quality objective for Water Contact Recreation. A minimum o f 26 samples are required to determine if water quality standards are being met. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being

Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 9 samples, tested for E. coli) and 3 of the 9 samples, tested for Fecal Coliform, exceed the water quality objective for Water Contact Recreation and these exceed the allowable frequency calculated from the equation in Table 4.2 of the Listing Policy. However, the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42627, Indicator Bacteria **Region 3**

Gallighan Slough

LOE ID:	13677
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gallighan Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gallighan Slough was collected at 1 monitoring site [Buena Vista Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-11/18/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42627, Indicator Bacteria **Region 3**

Gallighan Slough

LOE ID:	13676
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gallighan Slough to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Gallighan Slough was collected at 1 monitoring site [Buena Vista Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-11/18/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42627, Indicator Bacteria **Region 3**

Gallighan Slough

LOE ID:	13796
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gallighan Slough to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water

	Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gallighan Slough was collected at 1 monitoring site [Buena Vista Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-11/18/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42627, Indicator Bacteria **Region 3**

Gallighan Slough

LOE ID:	13795
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gallighan Slough to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gallighan Slough was collected at 1 monitoring site [Buena Vista Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-11/18/2003.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Ferrari Creek**
Water Body ID: **CAR3041102320080602114306**
Water Body Type: **River & Stream**

DECISION ID **39588** **Region 3**
Ferrari Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39588, Escherichia coli (E. coli) **Region 3**
Ferrari Creek

LOE ID: 18465

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3

Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39588, Escherichia coli (E. coli) **Region 3**

Ferrari Creek

LOE ID:	18466
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39589 Region 3

Ferrari Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39589, Nitrate Region 3

Ferrari Creek

LOE ID:	18246
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39894**	**Region 3**
Ferrari Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information' This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39894, Oxygen, Dissolved **Region 3**

Ferrari Creek

LOE ID:	18213
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39894, Oxygen, Dissolved **Region 3**

Ferrari Creek

LOE ID:	18212
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39895**	**Region 3**
Ferrari Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39895, Temperature, water **Region 3**

Ferrari Creek

LOE ID:	18596
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **39934** **Region 3**

Ferrari Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. One of 4 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and zero fo 4 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 4 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and zero fo 4 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39934, pH **Region 3**

Ferrari Creek

LOE ID:	18904
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39934, pH **Region 3**

Ferrari Creek

LOE ID:	18950
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39934, pH **Region 3**

Ferrari Creek

LOE ID:	18948
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and

	results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39934, pH **Region 3**

Ferrari Creek

LOE ID:	18949
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39934, pH **Region 3**

Ferrari Creek

LOE ID:	18887
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ferrari Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ferrari Creek was collected at 1 monitoring site [304-FERRA-21 - Ferrari Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Chualar Creek, South Branch**
Water Body ID: **CAR3091101020080604161515**
Water Body Type: **River & Stream**

DECISION ID	39924	Region 3
Chualar Creek, South Branch		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. Seven of the 7 nitrate samples and 21 of the 21 nitrate/nitrite samples exceed the water quality objective for Municipal and Domestic Supply.
Seven of the seven nitrate samples and 21 of the 21 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 6.48 mg/L to 6.99 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
2) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 129 g/m2 ash-free dry weight (AFDW) to 151 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
3) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 324 mg/m2 to 378 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 7 nitrate samples and 21 of the 21 nitrate/nitrite samples exceed the water quality objective for Municipal and Domestic Supply.
Seven of the seven nitrate samples and 21 of the 21 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39924, Nitrate **Region 3**

Chualar Creek, South Branch

LOE ID:	28100
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [Between Hwy 101 & Railway, South of Esperanza Rd, Old Stage Rd]
Temporal Representation:	Data was collected over the time period 8/22/2001-5/23/2002.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39924, Nitrate **Region 3**

Chualar Creek, South Branch

LOE ID:	28099
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [Between Hwy 101 & Railway, South of Esperanza Rd, Old Stage Rd]
Temporal Representation:	Data was collected over the time period 8/22/2001-5/23/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39924, Nitrate **Region 3**

Chualar Creek, South Branch

LOE ID:	48478

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39924, Nitrate **Region 3**

Chualar Creek, South Branch

LOE ID:	48477
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	21

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39924, Nitrate **Region 3**

Chualar Creek, South Branch

LOE ID:	48476
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39924, Nitrate **Region 3**

Chualar Creek, South Branch

LOE ID:	48475
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [

	309SOS - Chualar Creek South Branch at Old Stage, 309SBC - Chualar Creek South branch at Highway 101]
Temporal Representation:	Data was collected over the time period 10/29/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39924, Nitrate **Region 3**

Chualar Creek, South Branch

LOE ID:	48464
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SOS - Chualar Creek South Branch at Old Stage, 309SBC - Chualar Creek South branch at Highway 101]
Temporal Representation:	Data was collected over the time period 10/29/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39924, Nitrate **Region 3**

Chualar Creek, South Branch

LOE ID:	48463
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SOS - Chualar Creek South Branch at Old Stage, 309SBC - Chualar Creek South branch at Highway 101]
Temporal Representation:	Data was collected over the time period 10/29/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39924, Nitrate **Region 3**

Chualar Creek, South Branch

LOE ID:	13783
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [Between Hwy 101 & Railway, South of Esperanza Rd, Old Stage Rd]
Temporal Representation:	Data was collected over the time period 8/22/2001-5/23/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**47234**	**Region 3**
Chualar Creek, South Branch		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 21 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47234, Chlorophyll-a **Region 3**

Chualar Creek, South Branch

LOE ID:	48461
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47234, Chlorophyll-a **Region 3**

Chualar Creek, South Branch

LOE ID:	48462
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **47235** **Region 3**

Chualar Creek, South Branch

Pollutant: **Oxygen, Dissolved**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 21 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, zero of the 21 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold and Warm Freshwater Habitats. Therefore, the use support rating for this pollutant is set at insufficient information. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 21 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, zero of the 21 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47235, Oxygen, Dissolved **Region 3**

Chualar Creek, South Branch

LOE ID:	48492
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 4 of 21 samples exceed the

	criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47235, Oxygen, Dissolved **Region 3**

Chualar Creek, South Branch

LOE ID:	48489
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47235, Oxygen, Dissolved **Region 3**

Chualar Creek, South Branch

LOE ID:	48490
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47235, Oxygen, Dissolved **Region 3**

Chualar Creek, South Branch

LOE ID:	48491
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**47236**	**Region 3**
Chualar Creek, South Branch		

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Eight of the 24 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 24 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47236, Temperature, water **Region 3**

Chualar Creek, South Branch

LOE ID:	48527
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 8 of 21 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **39883** **Region 3**

Chualar Creek, South Branch

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty-three of the 23 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984) and 22 of the 23 samples also exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-three of the 23 samples exceed the cold freshwater habitat evaluation guideline and 22 of the 23 samples also exceed the warm freshwater habitat evaluation guideline and these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39883, Turbidity **Region 3**

Chualar Creek, South Branch

LOE ID:	48510
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39883, Turbidity **Region 3**

Chualar Creek, South Branch

LOE ID:	48511
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 20 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39883, Turbidity **Region 3**

Chualar Creek, South Branch

LOE ID:	13753
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 1 monitoring site [Between Hwy 101 & Railway, South of Esperanza Rd]
Temporal Representation:	Data was collected over the time period 8/22/2001-9/27/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39883, Turbidity **Region 3**

Chualar Creek, South Branch

LOE ID:	13752
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are

	as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 1 monitoring site [Between Hwy 101 & Railway, South of Esperanza Rd]
Temporal Representation:	Data was collected over the time period 8/22/2001-9/27/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**39897**	**Region 3**
Chualar Creek, South Branch		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Six of the 23 samples exceeded the water quality objectives for Drinking Water and Recreation and 2 of the 23 samples also exceed the water quality objectives for Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 23 samples exceeded the water quality objectives for Drinking Water and Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID:	48509
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID:	48508
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	21
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 5 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID:	48507
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 5 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID:	48494
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 5 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID:	48493
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID:	13874
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 1 monitoring site [Between Hwy 101 & Railway, South of Esperanza Rd]
Temporal Representation:	Data was collected over the time period 8/22/2001-9/27/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID:	13873
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 1 monitoring site [Between Hwy 101 & Railway, South of Esperanza Rd]
Temporal Representation:	Data was collected over the time period 8/22/2001-9/27/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID:	13872
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 1 monitoring site [Between Hwy 101 & Railway, South of Esperanza Rd]
Temporal Representation:	Data was collected over the time period 8/22/2001-9/27/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID:	13889
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Esperanza Creek was collected at 1 monitoring site [Between Hwy 101 & Railway, South of Esperanza Rd]
Temporal Representation: Data was collected over the time period 8/22/2001-9/27/2001.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39897, pH **Region 3**

Chualar Creek, South Branch

LOE ID: 13890

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Esperanza Creek was collected at 1 monitoring site [Between Hwy 101 & Railway, South of Esperanza Rd]
Temporal Representation: Data was collected over the time period 8/22/2001-9/27/2001.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):

DECISION ID **47233** **Region 3**

Chualar Creek, South Branch

Pollutant: **Ammonia**
Final Listing Decision: **List on 303(d) list (being addressed by USEPA approved TMDL)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which 3 of the 8 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. One LOE summarizes total ammonia data and zero of the 21 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 8 samples exceed the Basin Plan general objective for unionized ammonia and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. The Lower Salinas River Watershed Nutrient TMDL has been approved by the USEPA on October 13, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 47233, Ammonia **Region 3**

Chualar Creek, South Branch

LOE ID:	48445
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 8/26/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47233, Ammonia **Region 3**

Chualar Creek, South Branch

LOE ID:	48444
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 1/25/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47233, Ammonia **Region 3**

Chualar Creek, South Branch

LOE ID:	48446
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Esperanza Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [309SBC - Chualar Creek South branch at Highway 101, 309SOS - Chualar Creek South Branch at Old Stage]
Temporal Representation:	Data was collected over the time period 8/26/2008-11/19/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 38683 Region 3

Chualar Creek, South Branch

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Both of the samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Neither exceed the water quality objective for Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Both of the samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Neither exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38683, Escherichia coli (E. coli) — Region 3

Chualar Creek, South Branch

LOE ID:	13678
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as

	stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 1 monitoring site [Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/31/2002-8/13/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38683, Escherichia coli (E. coli) **Region 3**

Chualar Creek, South Branch

LOE ID:	13679
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Esperanza Creek was collected at 1 monitoring site [Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/31/2002-8/13/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID **38749** **Region 3**

Chualar Creek, South Branch

Pollutant: **Fecal Coliform**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 4 samples exceed the water quality objective for Water Contact Recreation. Two of the 4 samples exceed the water quality objective for Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 4 samples exceed the water quality objective for Water Contact Recreation. Two of the 4 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38749, Fecal Coliform **Region 3**

Chualar Creek, South Branch

LOE ID:	13778
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Coliform, Fecal (400MPN/100mL).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [Between Hwy 101 & Railway, South of Esperanza Rd, Old Stage Rd]
Temporal Representation: Data was collected over the time period 8/22/2001-8/13/2002.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38749, Fecal Coliform **Region 3**

Chualar Creek, South Branch

LOE ID: 13777

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Esperanza Creek to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Coliform, Fecal (400 MPN/100mL).
Data Reference: Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Esperanza Creek was collected at 2 monitoring sites [Between Hwy 101 & Railway, South of Esperanza Rd, Old Stage Rd]
Temporal Representation: Data was collected over the time period 8/22/2001-8/13/2002.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Dufour Creek**
Water Body ID: **CAR3041204120080602120055**
Water Body Type: **River & Stream**

DECISION ID **39400** **Region 3**
Dufour Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 21 samples exceed the water quality objective for Municipal and Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 21 samples exceed the water quality objective for Municipal and Domestic Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39400, Nitrate **Region 3**
Dufour Creek

LOE ID: 19651

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 21
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Dufour Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dufour Creek was collected at 1 monitoring site [304DUP_SCC - DUFOUR CR. ABOVE POND]
Temporal Representation:	Data was collected over the time period 4/25/2000-8/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	39310	Region 3
Dufour Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 18 samples exceed the water quality objectives for Cold or Warm Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the water quality objectives for Cold or Warm Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39310, Oxygen, Dissolved **Region 3**

Dufour Creek

LOE ID:	19770
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Dufour Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dufour Creek was collected at 1 monitoring site [304DUP_SCC - DUFOUR CR. ABOVE POND]
Temporal Representation:	Data was collected over the time period 4/25/2000-8/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39310, Oxygen, Dissolved **Region 3**

Dufour Creek

LOE ID:	19786
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Dufour Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dufour Creek was collected at 1 monitoring site [304DUP_SCC - DUFOUR CR. ABOVE POND]
Temporal Representation:	Data was collected over the time period 4/25/2000-8/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**39142**	**Region 3**
Dufour Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 18 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39142, Temperature, water **Region 3**

Dufour Creek

LOE ID:	19627
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Dufour Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Dufour Creek was collected at 1 monitoring site [304DUP_SCC - DUFOUR CR. ABOVE POND]
Temporal Representation:	Data was collected over the time period 4/25/2000-8/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the

dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	39273	Region 3
Dufour Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 18 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. None of the 18 samples exceed the objectives for Municipal and Domestic Supply, Water Contact Recreation or Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 18 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. None of the 18 samples exceed the objectives for Municipal and Domestic Supply, Water Contact Recreation or Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39273, pH	**Region 3**
Dufour Creek	

LOE ID:	19713
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Dufour Creek to determine beneficial use support

	and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dufour Creek was collected at 1 monitoring site [304DUP_SCC - DUFOUR CR. ABOVE POND]
Temporal Representation:	Data was collected over the time period 4/25/2000-8/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39273, pH **Region 3**

Dufour Creek

LOE ID:	19716
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Dufour Creek to determine beneficial use support and results are as follows: 1 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dufour Creek was collected at 1 monitoring site [

	304DUP_SCC - DUFOUR CR. ABOVE POND]
Temporal Representation:	Data was collected over the time period 4/25/2000-8/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39273, pH **Region 3**

Dufour Creek

LOE ID:	19714
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Dufour Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dufour Creek was collected at 1 monitoring site [304DUP_SCC - DUFOUR CR. ABOVE POND]
Temporal Representation:	Data was collected over the time period 4/25/2000-8/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39273, pH **Region 3**

Dufour Creek

LOE ID:	19715
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Dufour Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dufour Creek was collected at 1 monitoring site [304DUP_SCC - DUFOUR CR. ABOVE POND]
Temporal Representation:	Data was collected over the time period 4/25/2000-8/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39273, pH **Region 3**

Dufour Creek

LOE ID:	19712
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Dufour Creek to determine beneficial use support and results are as follows: 1 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dufour Creek was collected at 1 monitoring site [304DUP_SCC - DUFOUR CR. ABOVE POND]
Temporal Representation:	Data was collected over the time period 4/25/2000-8/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Doud Creek**
Water Body ID: **CAR3080001220080605155254**
Water Body Type: **River & Stream**

DECISION ID **39152** **Region 3**
Doud Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39152, Escherichia coli (E. coli) **Region 3**
Doud Creek

LOE ID: 18457

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 3

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39152, Escherichia coli (E. coli) **Region 3**

Doud Creek

LOE ID:	18442
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39884 Region 3

Doud Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objective for Municipal and Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39884, Nitrate Region 3

Doud Creek

LOE ID:	18546
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39422**	**Region 3**
Doud Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objectives for Cold or Warm Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the water quality objectives for Cold or Warm Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39422, Oxygen, Dissolved **Region 3**

Doud Creek

LOE ID:	18082
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39422, Oxygen, Dissolved **Region 3**

Doud Creek

LOE ID:	18098
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39495**	**Region 3**
Doud Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples

	is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39495, Temperature, water **Region 3**

Doud Creek

LOE ID:	18709
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **39858** **Region 3**

Doud Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, Municipal and Domestic Supply, Water Contact and Non-contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, Municipal and Domestic Supply, Water Contact and Non-contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39858, pH **Region 3**

Doud Creek

LOE ID:	19140
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-

	31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39858, pH **Region 3**

Doud Creek

LOE ID:	19138
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39858, pH **Region 3**

Doud Creek

LOE ID:	19137
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39858, pH **Region 3**

Doud Creek

LOE ID:	19141
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39858, pH **Region 3**

Doud Creek

LOE ID:	19139
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Doud Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Doud Creek was collected at 1 monitoring site [308-DOUD-31 - Doud Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Dolphin Brook**
Water Body ID: **CAR3095004220080605155755**
Water Body Type: **River & Stream**

DECISION ID **39525** **Region 3**
Dolphin Brook

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 3 samples exceed the water quality objective for Water Contact Recreation. None of the 3 samples exceed the water quality objective for Non-Contact Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39525, Escherichia coli (E. coli) **Region 3**
Dolphin Brook

LOE ID: 18422

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39525, Escherichia coli (E. coli) Region 3

Dolphin Brook

LOE ID:	18423
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39318 Region 3

Dolphin Brook

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the water quality objective for Municipal and Domestic Supply. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39318, Nitrate Region 3

Dolphin Brook

LOE ID:	18527
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39373**	**Region 3**
Dolphin Brook		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objectives for Cold or Warm Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the water quality objectives for Cold or Warm Freshwater Habitat.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39373, Oxygen, Dissolved **Region 3**

Dolphin Brook

LOE ID:	18039
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39373, Oxygen, Dissolved **Region 3**

Dolphin Brook

LOE ID:	18040
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39304**	**Region 3**
Dolphin Brook		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Cold Freshwater Habitat. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the water quality objective for Cold Freshwater Habitat. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39304, Temperature, water **Region 3**

Dolphin Brook

LOE ID:	18689
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **39350** **Region 3**

Dolphin Brook

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Cold and Warm Freshwater Habitat, Non-Contact Recreation, Contact Recreation, or Municipal and Domestic Supply water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Cold and Warm Freshwater Habitat, Non-Contact Recreation, Contact Recreation, or Municipal and Domestic Supply water quality objectives. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39350, pH **Region 3**

Dolphin Brook

LOE ID:	19040
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]

Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39350, pH **Region 3**

Dolphin Brook

LOE ID:	19037
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39350, pH **Region 3**

Dolphin Brook

LOE ID:	19036
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39350, pH **Region 3**

Dolphin Brook

LOE ID:	19039
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39350, pH **Region 3**

Dolphin Brook

LOE ID:	19038
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dolphin Brook to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dolphin Brook was collected at 1 monitoring site [309-DOLPH-31 - Dolphin Brook]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Devereux Creek**
Water Body ID: **CAR3153102020080612164650**
Water Body Type: **River & Stream**

DECISION ID **38647** **Region 3**
Devereux Creek

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Six of the 22 samples exceed the water quality objective for contact recreation (i.e. swimming) but only two of the 22 samples exceed the water quality objective for non-contact recreation.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating for non-contact recreation uses. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 22 samples exceed the water quality objective for contact recreation (i.e. swimming) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38647, Fecal Coliform **Region 3**
Devereux Creek

LOE ID: 12368

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38647, Fecal Coliform **Region 3**

Devereux Creek

LOE ID:	12352
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 5 of 14

	samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38647, Fecal Coliform **Region 3**

Devereux Creek

LOE ID:	50046
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38647, Fecal Coliform **Region 3**

Devereux Creek

LOE ID:	50043
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38712 Region 3

Devereux Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Seven of the 25 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 25 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38712, Oxygen, Dissolved — Region 3

Devereux Creek

LOE ID:	50074
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38712, Oxygen, Dissolved **Region 3**

Devereux Creek

LOE ID:	50073
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38712, Oxygen, Dissolved **Region 3**

Devereux Creek

LOE ID:	13199
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Devereux Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38712, Oxygen, Dissolved **Region 3**

Devereux Creek

LOE ID:	13198
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Devereux Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38712, Oxygen, Dissolved **Region 3**

Devereux Creek

LOE ID:	13182
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 8 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38712, Oxygen, Dissolved **Region 3**

Devereux Creek

LOE ID:	13057
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38900	Region 3
Devereux Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 21 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. One LOEs summarize total ammonia data and zero of the 23 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. One LOEs summarize total ammonia data and zero of the 23 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38900, Ammonia	**Region 3**
Devereux Creek	

LOE ID:	10580
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38900, Ammonia **Region 3**

Devereux Creek

LOE ID:	10581
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38900, Ammonia **Region 3**

Devereux Creek

LOE ID:	50058
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38900, Ammonia **Region 3**

Devereux Creek

LOE ID:	50038
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38458** **Region 3**

Devereux Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 21 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-

stimulation risk.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 21 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38458, Chlorophyll-a **Region 3**

Devereux Creek

LOE ID:	10596
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural

	Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 3/7/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38458, Chlorophyll-a **Region 3**

Devereux Creek

LOE ID:	50059
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47222** **Region 3**

Devereux Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the 8 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 8 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47222, Escherichia coli (E. coli) **Region 3**

Devereux Creek

LOE ID:	50044

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**39069**	**Region 3**
Devereux Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 46 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. This use is fully supported. Zero of the 8 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 46 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39069, Nitrate **Region 3**

Devereux Creek

LOE ID:	10595
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39069, Nitrate **Region 3**

Devereux Creek

LOE ID:	14795
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Devereux Creek to determine beneficial use support and results are as follows: 2 of 23 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 4 monitoring sites [DV21 - Devereaux Creek, DV22 - Devereaux Creek, DV23 - Devereaux Creek, DV24 - Devereaux Creek]
Temporal Representation:	Data was collected over the time period 5/10/2006-1/9/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39069, Nitrate **Region 3**

Devereux Creek

LOE ID:	50041
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39069, Nitrate **Region 3**

Devereux Creek

LOE ID:	50040
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41915**	**Region 3**
Devereux Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Zero LOEs summarize sediment samples. Three LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and one additional water sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in water samples. One of the three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 3 samples exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41915, Toxicity **Region 3**

Devereux Creek

LOE ID:	23869
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41915, Toxicity **Region 3**

Devereux Creek

LOE ID:	23867
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41915, Toxicity **Region 3**

Devereux Creek

LOE ID:	54098
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity. The toxicity test included total cell count of Selenastrum capricornutum and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315DEVxxx.
Temporal Representation:	The sample was collected in August 2008.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission.
QAPP Information Reference(s):	

DECISION ID	**38983**	**Region 3**
Devereux Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. In LOEs 13197 and 13200, turbidity data are compared to the cold freshwater habitat evaluation guideline and 8 of 17 samples exceed the Evaluation Guideline (Sigler et al., 1984). However, this water body is not designated as Cold Freshwater Habitat and staff are not aware of documentation of this creek or watershed supporting steelhead populations. Therefore this Evaluation Guideline is not relevant for this water body. Therefore LOEs 13197 and 13200 are not included in the decision. One of Eight samples (LOE 50076) exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable

beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of Eight samples (LOE 50076) exceed the warm freshwater habitat evaluation and this does not exceed the allowable frequency listed in table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38983, Turbidity **Region 3**

Devereux Creek

LOE ID:	50076
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38983, Turbidity **Region 3**

Devereux Creek

LOE ID:	13197
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 6 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38983, Turbidity **Region 3**

Devereux Creek

LOE ID:	13200
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Devereux Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39045**	**Region 3**
Devereux Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. Zero of the 25 samples exceed the water quality objectives for Drinking Water, Recreation, and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 25 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	12372
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	12390
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	12391
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	12371
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]

Temporal Representation: Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID: 12388

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]

Temporal Representation: Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID: 12369

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	12370
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	12389
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	50042
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	50047
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	50075
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39045, pH **Region 3**

Devereux Creek

LOE ID:	50045
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40818** **Region 3**

Devereux Creek

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the

Conclusion:	Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40818, Anthracene **Region 3**

Devereux Creek

LOE ID:	15767
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38941 Region 3

Devereux Creek

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38941, Arsenic Region 3

Devereux Creek

LOE ID:	15838
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40556**	**Region 3**
Devereux Creek		

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40556, Benzo(a)anthracene **Region 3**

Devereux Creek

LOE ID:	15698
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40618** **Region 3**

Devereux Creek

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the

Conclusion:	Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40618, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Devereux Creek

LOE ID:	15531
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38915 Region 3

Devereux Creek

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38915, Cadmium Region 3

Devereux Creek

LOE ID:	15380
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40674**	**Region 3**
Devereux Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single water sample exceeds the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use one of the water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single water sample exceeds the Evaluation Guideline (Sipmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40674, Chlorpyrifos **Region 3**

Devereux Creek

LOE ID:	16359
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38643	Region 3
Devereux Creek		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38643, Chromium	**Region 3**
Devereux Creek	

LOE ID:	16074
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40651**	**Region 3**
Devereux Creek		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40651, Chrysene (C1-C4) **Region 3**

Devereux Creek

LOE ID:	15907
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38816** **Region 3**

Devereux Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status

and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38816, Copper **Region 3**

Devereux Creek

LOE ID:	16745
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40716** **Region 3**

Devereux Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40716, Diazinon **Region 3**

Devereux Creek

LOE ID:	16783
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40920**	**Region 3**
Devereux Creek		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40920, Dieldrin **Region 3**

Devereux Creek

LOE ID:	16714
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40608** **Region 3**

Devereux Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40608, Endrin — Region 3

Devereux Creek

LOE ID:	16516
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40669 Region 3

Devereux Creek

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40669, Fluoranthene Region 3

Devereux Creek

LOE ID:	16860
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40670**	**Region 3**
Devereux Creek		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40670, Fluorene **Region 3**

Devereux Creek

LOE ID:	16431
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38711** **Region 3**

Devereux Creek

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38711, Lead **Region 3**

Devereux Creek

LOE ID:	17313
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39011 Region 3

Devereux Creek

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are needed to add the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39011, Mercury Region 3

Devereux Creek

LOE ID:	17127
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40623**	**Region 3**
Devereux Creek		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence is necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40623, Naphthalene **Region 3**

Devereux Creek

LOE ID:	17228
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39012** **Region 3**

Devereux Creek

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are needed to add that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39012, Nickel — Region 3

Devereux Creek

LOE ID:	17033
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40468 Region 3

Devereux Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence is necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40468, Phenanthrene Region 3

Devereux Creek

LOE ID:	16878
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40627	Region 3
Devereux Creek		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40627, Pyrene **Region 3**
Devereux Creek

LOE ID:	16997
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38645** **Region 3**
Devereux Creek

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38645, Zinc **Region 3**

Devereux Creek

LOE ID:	17918
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Devereux Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Devereux Creek was collected at 1 monitoring site [315DEV-Devereux Slough at the Golf Course culvert]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Dani Creek**
Water Body ID: **CAR3080005220080605165141**
Water Body Type: **River & Stream**

DECISION ID **38793** **Region 3**
Dani Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Water Contact or Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the water quality objective for Water Contact or Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38793, Escherichia coli (E. coli) **Region 3**
Dani Creek

LOE ID: 17601

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38793, Escherichia coli (E. coli) Region 3

Dani Creek

LOE ID:	17600
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39004 **Region 3**

Dani Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the water quality objective for Agricultural or Municipal Supply. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the water quality objective for Agricultural or Municipal Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39004, Nitrate **Region 3**

Dani Creek

LOE ID:	18508
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	38478	Region 3
Dani Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Cold or Warm Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38478, Oxygen, Dissolved **Region 3**

Dani Creek

LOE ID:	18037
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38478, Oxygen, Dissolved **Region 3**

Dani Creek

LOE ID:	18038
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38495 Region 3

Dani Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38495, Temperature, water Region 3

Dani Creek

LOE ID:	18670

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**38498**	**Region 3**
Dani Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, Water Contact and Non-Contact Recreation, and Municipal and Domestic Supply. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, Water Contact and Non-Contact Recreation, and Municipal and Domestic Supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38498, pH **Region 3**

Dani Creek

LOE ID:	18977
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38498, pH **Region 3**

Dani Creek

LOE ID:	18976

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38498, pH **Region 3**

Dani Creek

LOE ID:	18974
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38498, pH **Region 3**

Dani Creek

LOE ID:	18975
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38498, pH **Region 3**

Dani Creek

LOE ID:	18973
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dani Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dani Creek was collected at 1 monitoring site [308-DANIC-31 - Dani Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Cuyama River (below Twitchell Reservoir)**
Water Body ID: **CAR3123008520080611174339**
Water Body Type: **River & Stream**

DECISION ID **38866** **Region 3**
Cuyama River (below Twitchell Reservoir)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE summarized unionized ammonia data in which zero of the 10 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. One LOE summarized total ammonia data and zero of the 12 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 10 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 12 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38866, Ammonia **Region 3**
Cuyama River (below Twitchell Reservoir)

LOE ID: 9976

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 2/17/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38866, Ammonia **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	9748
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0

	of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 4/12/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38866, Ammonia **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50030
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]

Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38866, Ammonia **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50017
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47216 **Region 3**

Cuyama River (below Twitchell Reservoir)

Pollutant: **Benthic Community Effects**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample had an IBI score below 40 which indicates poor water quality for this area. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 47216, Benthic Community Effects **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	54096
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI scores is below 39 and is therefore below the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in the Cuyama River resulting in the collection of more than one sample and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score that was collected following the SWAMP Reach Wide Benthos method, or RWB. The IBI score for this sample was 33.
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 312CUTxxx-Cuyama River below Twitchell @ White Rock Lane
Temporal Representation:	Surveys done on April 2, 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Maria Rotation).
QAPP Information Reference(s):	

DECISION ID 38569 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 9 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38569, Boron Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	50011

Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38569, Boron **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	9977
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 2/17/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **47213** **Region 3**

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the 4 samples exceed the site specific water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 4 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47213, Chloride **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50026
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Chloride.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39410** **Region 3**

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39410, Chlorophyll-a **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50031
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39410, Chlorophyll-a **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	9978
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 2/17/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47215 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 4 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47215, Escherichia coli (E. coli) Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	50022
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38734 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 11 samples exceed the water quality objective for contact recreation (i.e. swimming) and zero of the 11 samples exceed the water quality objective for non-contact recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 11 samples exceed the water quality objective for contact recreation (i.e. swimming) and zero of the 11 samples exceed the water quality objective for non-contact recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38734, Fecal Coliform **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50021
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38734, Fecal Coliform — Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	50024
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38734, Fecal Coliform — Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	11713
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 2/17/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38734, Fecal Coliform **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	11712
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200

	MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 2/17/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38412 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 4 nitrate samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. Zero of the 3 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 3 nitrate/nitrite samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. Insufficient evidence was found to support nitrate as a cause of impairment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Zero of the 12 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 4 nitrate samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. Zero of the 3 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 3 nitrate/nitrite samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38412, Nitrate **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	9979
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 2/17/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38412, Nitrate **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	9747
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 2/17/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38412, Nitrate **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50019
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38412, Nitrate **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50018
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38412, Nitrate **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50013
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38412, Nitrate **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50014
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38412, Nitrate **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50032
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38412, Nitrate **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50033
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47217 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47217, Nitrogen, Nitrite Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	50015
Pollutant:	Nitrogen, Nitrite

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39468 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and zero of 4 samples exceed the water quality objective for protection of spawning habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater and Spawning Habitats. Therefore, the saturation data is used only as supporting information and the use support

rating for this pollutant is set at insufficient information.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceeded the Warm Freshwater Habitat water quality objective and 0 of 4 samples exceeded the water quality objective for Spawning Habitat. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39468, Oxygen, Dissolved **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50035
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39468, Oxygen, Dissolved **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50034
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39468, Oxygen, Dissolved **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50029
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39468, Oxygen, Dissolved **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	13584
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 2/17/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39468, Oxygen, Dissolved **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	13569
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 2/17/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	47214	Region 3
Cuyama River (below Twitchell Reservoir)		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the 4 samples exceed the site specific water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 4 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47214, Sodium	**Region 3**
Cuyama River (below Twitchell Reservoir)	

LOE ID:	50028
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Sodium.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 70 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39361 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 10 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 10 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39361, Specific Conductivity **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50012
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39361, Specific Conductivity **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	11732
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 4/12/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47218 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the 4 samples exceed the site specific water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 4 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47218, Total Dissolved Solids **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50027
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 900 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38777** **Region 3**

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 7 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 7 samples exceed the warm freshwater habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38777, Turbidity — Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	13586
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 4/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38777, Turbidity **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50037
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38925 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 11 samples exceed the water quality objective for Agricultural supply, 2 of the 11 samples exceeded the water quality objectives for Drinking Water and Recreation and zero of the 11 samples exceed the water quality objective for Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the water quality objective for Agricultural supply, 2 of the 11 samples exceeded the water quality objectives for Drinking Water and Recreation and zero of the 11 samples exceed the water quality objective for Warm Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38925, pH Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	50023
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38925, pH **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50036
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38925, pH **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50020
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38925, pH **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50016
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38925, pH **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	50025
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 1/30/2007-4/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38925, pH **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	11728
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 3/2/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38925, pH — Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	11729
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 3/2/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38925, pH — Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	11731
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 3/2/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38925, pH **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	11714
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 3/2/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38925, pH **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	11730
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected over the time period 3/2/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID 41916 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41916, Chlorpyrifos Region 3

Cuyama River (below Twitchell Reservoir)

LOE ID:	16158
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41917 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The decision for the 2010 303(d) list used 0.16 ug/L (Siepmann and Finlayson, 2000) as the evaluation guideline and resulted in zero out of one sample exceeding this guideline. No new samples were evaluated during this listing cycle, however, 0.1 ug/L (Finlayson, 2004) is now being used as the evaluation guideline, which resulted in the single sample exceeding the guideline. Using the evaluation guideline of 0.1 ug/L, the single sample exceeded the evaluation guideline (Finlayson, 2004) set to protect for aquatic life

beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. The decision remains unchanged.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample exceeded the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses however, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41917, Diazinon **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	16837
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41920 Region 3

Cuyama River (below Twitchell Reservoir)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. One LOE summarizes sediment samples. Zero sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, one total sample is available to assess toxic effects in sediment samples. Zero of the one sediment samples resulted in a significant toxic effect to one or more test organisms. Three LOEs summarize water samples. One water sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, one total sample is available to assess toxic effects in water samples. Zero of the one water sample resulted in a significant toxic effect to one or more test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exhibit significant toxic effects to any test organism relative to the control tests and therefore did not exceed the water quality objective. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41920, Toxicity **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	54097
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample were collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312CUTxxx.
Temporal Representation:	The sample was collected in April 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41920, Toxicity **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	23863
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41920, Toxicity **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	23862
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001)

	data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41920, Toxicity **Region 3**

Cuyama River (below Twitchell Reservoir)

LOE ID:	23860
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Cuyama River(below res) was collected at 1 monitoring site [312CUT-Cuyama River below Twitchell at White Rock Lane]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Cuyama River (above Twitchell Reservoir)**
Water Body ID: **CAR3123006020080611173645**
Water Body Type: **River & Stream**

DECISION ID **43106** **Region 3**
Cuyama River (above Twitchell Reservoir)

Pollutant: **Boron**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Eleven of the 61 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of the 61 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43106, Boron **Region 3**
Cuyama River (above Twitchell Reservoir)

LOE ID: 9948

Pollutant: Boron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Agricultural Supply

Number of Samples:	35
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 6 of 35 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43106, Boron **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9931
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for Boron.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 4/13/2000-6/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43106, Boron **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50236
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood

	Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38489 **Region 3**

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 61 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-two of the 61 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38489, Chloride **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50237
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for Chloride.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38489, Chloride **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9961
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	45
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 17 of 45 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38889 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Fifty-three of the 61 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-three of the 61 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38889, Sodium **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9930
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	45
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 38 of 45 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38889, Sodium **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50270
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 15 of 16 samples exceed the criterion for Sodium.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38856 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

Three lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 61 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 61 samples exceed the water quality objective for agricultural uses and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38856, Specific Conductivity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50238
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38856, Specific Conductivity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11676
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38856, Specific Conductivity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11655
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 11 of 39 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38899 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Seven of the 61 samples exceed the water quality objective for Agricultural supply, 11 of the 61 samples exceeded the water quality objectives for Drinking Water and Recreation and zero of the 61 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of the 61 samples exceeded the water quality objectives for Drinking Water and Recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11694
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11711
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11695
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11656
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 7 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11657
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood

	Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11693
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11692

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11691
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11675
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11658
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 11 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11673
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 11 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11674
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	11

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 11 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50254
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is

	greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50009
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49999
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50001
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49989
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38899, pH **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49996
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38873 **Region 3**

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Grazing-Related Sources
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for removal on the CWA section 303(d) List under sections 4.3 and

Conclusion:	4.2 of the Listing Policy. Under 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 58 samples exceed the water quality objective for contact recreation (i.e. swimming) but zero of the 58 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of the 58 samples exceed the water quality objective for contact recreation and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Total Maximum Daily Loads for Santa Maria River Watershed Fecal Indicator Bacteria has been approved by the USEPA on April 24, 2013. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. This water body pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 38873, Fecal Coliform **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	11638
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 13 of 42 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period

exceed 400 MPN/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]

Temporal Representation: Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38873, Fecal Coliform **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID: 11639

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 42
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Coliform, Fecal.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]

Temporal Representation: Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38873, Fecal Coliform **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50000
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38873, Fecal Coliform **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49997
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 4 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38488 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four

LOEs summarize unionized ammonia data in which zero of the 53 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 61 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 53 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 61 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38488, Ammonia **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9945
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s

	Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38488, Ammonia **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9946
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38488, Ammonia **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9947
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38488, Ammonia **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49992
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38488, Ammonia **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50271
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38488, Ammonia **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50003
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47210	Region 3
Cuyama River (above Twitchell Reservoir)		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample had an IBI score below 40 which indicates poor water quality for this area. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 47210, Benthic Community Effects	**Region 3**
Cuyama River (above Twitchell Reservoir)	

LOE ID:	54094
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI scores in this water body was 39 or lower and therefore below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 312CAVxxx-Cuyama River at Highway 33
Temporal Representation:	Surveys done on April 7, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Maria Rotation).
QAPP Information Reference(s):	

DECISION ID 39025 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 56 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 56 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39025, Chlorophyll-a Region 3

Cuyama River (above Twitchell Reservoir)

LOE ID:	50004
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-8/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39025, Chlorophyll-a **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50272
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama

	River(above res) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-8/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39025, Chlorophyll-a **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9963
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39025, Chlorophyll-a **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9962
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47209 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. One line of evidence available in the administrative record to assess this pollutant. Three of the 16 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Note that The Total Maximum Daily Loads for Santa Maria River Watershed Fecal Indicator Bacteria has been approved by the USEPA on April 24, 2013. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 16 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47209, Escherichia coli (E. coli) **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49998
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38829 **Region 3**

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 61 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 16 nitrate samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 9 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 9 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat beneficial uses. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. Insufficient evidence was found to support nitrate as a cause of impairment for Cold or Warm Freshwater habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 61 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 16 nitrate samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 9 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 9 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat beneficial uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50006
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 2 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50005
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50273
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50252
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 2 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49995
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 2 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49994
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49986
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 2 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50251
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9928
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38829, Nitrate **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	9929

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47211 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47211, Nitrogen, Nitrite **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50253
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38999 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Zero of 67 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and zero of the 67 samples also exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for this pollutant is set at fully supporting. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 67 samples exceeded the Cold and Warm Freshwater Habitat water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved Region 3

Cuyama River (above Twitchell Reservoir)

LOE ID:	49987
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50007
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]

Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50008
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49988
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13515
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	12617
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13514
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13551
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	12616
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13530
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 5 of 45 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s

	Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13516
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 5 of 45 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38999, Oxygen, Dissolved **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13550
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39074 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Three lines of evidence are available in the administrative record to assess this pollutant. Sixteen of 67 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat

beneficial use. However, this evaluation guideline is specific to steelhead trout and since the construction of Twitchell Dam in the late 1950's the portion of the River above the reservoir is not reachable by anadromous fish. Furthermore, this reach and is intermittent and dry most of the year. Therefore this temperature guideline is not relevant to the water body and the beneficial use rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. This temperature evaluation guideline is not relevant to the water body.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this temperature guideline is not relevant to the waterbody.

Line of Evidence (LOE) for Decision ID 39074, Temperature, water **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13532
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 11 of 45 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 4 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUL-Cuyama River above Lockwood turnoff, 312CUY-Cuyama River d/s

	Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/11/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39074, Temperature, water **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13566
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39074, Temperature, water **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49991
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38520** **Region 3**

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. Ten of the 34

samples exceed the evaluation guideline (Shoup and Wahl 2009) used to interpret the Warm Freshwater Habitat water quality objective. LOEs for turbidity and the Cold Freshwater Habitat water quality objective are not included in the rationale for this decision. Although 10 of the 34 samples exceed the evaluation guideline (Sigler et al. 1984) used to interpret the Cold Freshwater Habitat water quality objective, the guideline is specific to steelhead trout and since the construction of Twitchell Dam in the late 1950's the portion of the River above the reservoir is not reachable by anadromous fish. Therefore the Cold Freshwater Habitat turbidity evaluation guideline is not relevant to the water body and the beneficial use rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 34 samples exceed the evaluation guideline (Shoup and Wahl 2009) used to interpret the Warm Freshwater Habitat water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38520, Turbidity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13533
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 8 of 18 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 4/13/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38520, Turbidity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	13549
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 8 of 18 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 4/13/2000-4/13/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38520, Turbidity — Region 3

Cuyama River (above Twitchell Reservoir)

LOE ID:	13568
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 2 monitoring sites [312CAV-Cuyama River at Highway 33, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38520, Turbidity — Region 3

Cuyama River (above Twitchell Reservoir)

LOE ID:	13567
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 2 monitoring sites [312CAV-Cuyama River at Highway 33, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38520, Turbidity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	49990
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon.

	Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-8/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38520, Turbidity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	50010
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cuyama River(above res) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 3 monitoring sites [312CAV-Cuyama River at Highway 33, 312CCC-Cuyama River d/s Cottonwood Canyon, 312CUY-Cuyama River d/s Buckhorn Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-8/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41924** **Region 3**

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of zero water samples exceeded the water Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use the single water sample collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero water samples exceeded the water Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41924, Chlorpyrifos — Region 3

Cuyama River (above Twitchell Reservoir)

LOE ID:	16125
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(above res) to determine beneficial use support and results are as

	follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 1 monitoring site [312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41924, Chlorpyrifos **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	16126
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 1 monitoring site [312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41935 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41935, Diazinon **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	16786
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 1 monitoring site [312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41935, Diazinon **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	16773
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 1 monitoring site [312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41829 Region 3

Cuyama River (above Twitchell Reservoir)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. One LOE summarize sediment samples. Zero sediment samples are summarized in LOEs using the

test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, one total sample is available to assess toxic effects in sediment samples. Zero of the one sediment samples resulted in a significant toxic effect to one or more test organisms.

Four LOEs summarizes water samples. One water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, one total sample is available to assess toxic effects in water samples. Zero of the one water sample resulted in a significant toxic effect to one or more test organisms.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exhibit a significant toxic effect to any of the test organisms and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41829, Toxicity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	54095
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312CCCxxx.
Temporal Representation:	The sample was collected in April 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41829, Toxicity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	23845
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 1 monitoring site

	[312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41829, Toxicity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	23846
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 1 monitoring site [312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41829, Toxicity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	23828
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 1 monitoring site [312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41829, Toxicity **Region 3**

Cuyama River (above Twitchell Reservoir)

LOE ID:	23829
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Cuyama River(above res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Cuyama River(above res) was collected at 1 monitoring site [312CCC-Cuyama River d/s Cottonwood Canyon]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Cieneguitas Creek**
Water Body ID: **CAR3153101120080612165908**
Water Body Type: **River & Stream**

DECISION ID **38933** **Region 3**
Cieneguitas Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 56 samples exceed the water quality objective for municipal and domestic supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 56 samples exceed the water quality objective for municipal and domestic supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38933, Nitrate **Region 3**
Cieneguitas Creek

LOE ID: 14794

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 56

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID	**38554**	**Region 3**
Cieneguitas Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 54 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of the 54 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38554, Turbidity **Region 3**

Cieneguitas Creek

LOE ID:	15009
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38554, Turbidity **Region 3**

Cieneguitas Creek

LOE ID:	15008

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID	**38613**	**Region 3**
Cieneguitas Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One sample exceeds the Cold and Warm Freshwater Habitat water quality objective and 2 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact

Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One sample exceeds the Cold and Warm Freshwater Habitat water quality objective and 2 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38613, pH **Region 3**

Cieneguitas Creek

LOE ID:	14951
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-12/3/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel

	Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38613, pH **Region 3**

Cieneguitas Creek

LOE ID:	14932
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-12/3/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38613, pH **Region 3**

Cieneguitas Creek

LOE ID:	14949
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-12/3/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38613, pH **Region 3**

Cieneguitas Creek

LOE ID:	14948
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1

	- Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-12/3/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38613, pH **Region 3**

Cieneguitas Creek

LOE ID:	14950
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-12/3/2006. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID **39030** **Region 3**

Cieneguitas Creek

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Forty-four of 54 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Two of 54 samples exceed the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-four of 54 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39030, Enterococcus **Region 3**

Cieneguitas Creek

LOE ID:	15005
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39030, Enterococcus **Region 3**

Cieneguitas Creek

LOE ID:	15004
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	44
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 44 of 54 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID	39019	Region 3
Cieneguitas Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Twenty-nine of 55 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Five of the 55 samples exceed the water quality objective for Non-Contact Recreation., and this beneficial use is fully supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-nine of 55 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39019, Escherichia coli (E. coli)	**Region 3**
Cieneguitas Creek	

LOE ID:	14982
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	55
Number of Exceedances:	5

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 5 of 55 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 39019, Escherichia coli (E. coli) Region 3

Cieneguitas Creek

LOE ID:	14967
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	29
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 29 of 55 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID **38968** **Region 3**

Cieneguitas Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three water quality objectives are assessed. Eighteen of 56 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 4 of the 56 samples also exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats and the dissolved oxygen levels are supporting the Warm beneficial use. Therefore, the use support rating for this pollutant is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighteen of 56 samples exceeded the Cold Freshwater Habitat water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38968, Oxygen, Dissolved **Region 3**

Cieneguitas Creek

LOE ID:	14923
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 27 of 55 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38968, Oxygen, Dissolved **Region 3**

Cieneguitas Creek

LOE ID:	14924
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 27 of 55 samples exceed the criterion for Oxygen,

	Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38968, Oxygen, Dissolved **Region 3**

Cieneguitas Creek

LOE ID:	15183
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 4 of 56 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]

Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38968, Oxygen, Dissolved **Region 3**

Cieneguitas Creek

LOE ID:	15182
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 18 of 56 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID **38475** **Region 3**

Cieneguitas Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Ten of 55 samples exceeded the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This supports rejection of the null hypothesis. Unknown point sources contribute to this impairment. Santa Barbara Channel Keeper staff documented water temperature reading near 30 degrees Celsius in January 2006 in Cieneguitas Creek and downstream in Atascadero Creek. Staff were unable to identify the source of the warm water on that date. This Evaluation Guideline is relevant for this waterbody as it is a tributary to Atascadero Creek. A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Atascadero Creek as having "Definite run or population" of steelhead trout. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 55 samples exceeded the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38475, Temperature, water **Region 3**

Cieneguitas Creek

LOE ID:	15045
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	10

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Cieneguitas Creek to determine beneficial use support and results are as follows: 10 of 55 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Cieneguitas Creek was collected at 1 monitoring site [CG1 - Cieneguitas Creek at Nogal Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Chualar Creek**
Water Body ID: **CAR3091900020080604161337**
Water Body Type: **River & Stream**

DECISION ID **44621** **Region 3**
Chualar Creek

Pollutant: **Temperature, water**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Seven of the 43 samples exceeded the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 43 samples exceeded the evaluation guideline but this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44621, Temperature, water **Region 3**
Chualar Creek

LOE ID: 48443

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 21

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44621, Temperature, water **Region 3**

Chualar Creek

LOE ID:	14111
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [Chualar River Rd, Old Stage Rd]
Temporal Representation:	Data was collected over the time period 3/17/2002-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44621, Temperature, water **Region 3**

Chualar Creek

LOE ID:	14551
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	38705	Region 3
Chualar Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Fifty-seven of the 65 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984) and the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-seven of the 65 samples exceed the cold and warm freshwater habitat evaluation guidelines and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38705, Turbidity	**Region 3**
Chualar Creek	

LOE ID:	14535
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring

	(R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38705, Turbidity **Region 3**

Chualar Creek

LOE ID:	14550
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38705, Turbidity **Region 3**

Chualar Creek

LOE ID:	13754
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 27 of 35 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38705, Turbidity **Region 3**

Chualar Creek

LOE ID:	48442
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38705, Turbidity **Region 3**

Chualar Creek

LOE ID:	48427
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to

	determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38705, Turbidity **Region 3**

Chualar Creek

LOE ID:	13755
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 27 of 35 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID 38706 **Region 3**

Chualar Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Thirty-two of the 67 samples exceeded the water quality objectives for Drinking Water and Recreation and 14 of the 67 samples exceed the water quality objective for Cold Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Thirty-two of the 67 samples exceeded the water quality objectives for Drinking Water and Recreation and 14 of the 67 samples exceed the water quality objective for Cold Freshwater Habitats. . Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	14534
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	13894
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 23 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	13893
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 23 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	14533
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	14532
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	13891
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 11 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	13892
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 23 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	14531
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	48422
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 3 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	48423
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 7 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	48424
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 7 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	48425
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	19
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 7 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38706, pH **Region 3**

Chualar Creek

LOE ID:	48426
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 3 of 19 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38706, pH — Region 3

Chualar Creek

LOE ID:	14517
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38706, pH — Region 3

Chualar Creek

LOE ID:	13641
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	39
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 11 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID **38870** **Region 3**

Chualar Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which 8 of the 13 samples exceed the Basin Plan general

objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 30 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section [NUMBER] of the Policy.
2. The data used satisfies the data quantity requirements of section NUMBER of the Policy.
3. Eight of the 13 samples exceed the water quality objective and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by the USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

This water body-pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 38870, Ammonia **Region 3**

Chualar Creek

LOE ID:	14568
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 3/22/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38870, Ammonia **Region 3**

Chualar Creek

LOE ID:	48125
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38870, Ammonia **Region 3**

Chualar Creek

LOE ID:	48126
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualar Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 5/30/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38870, Ammonia **Region 3**

Chualar Creek

LOE ID:	48137
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to

	determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualar Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 5/30/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38870, Ammonia **Region 3**

Chualar Creek

LOE ID:	14256
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/23/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38870, Ammonia **Region 3**

Chualar Creek

LOE ID:	14567
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 3/22/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38998	Region 3
Chualar Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Thirty-seven of the 42 nitrate samples and 22 of the 28 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Forty-two of the 42 nitrate samples and 20 of the 20 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 3.99 mg/L to 12.21 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L.
2) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 5.93 mg/L to 6.99 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 119 g/m2 ash-free dry weight (AFDW) to 155 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 297 mg/m2 to 387 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-seven of the 42 nitrate samples and 22 of the 28 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Forty-two of the 42 nitrate samples and 20 of the 20 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	48140
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualar Creek at Highway 101]
Temporal Representation:	Data was collected on a single day 3/24/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	48163
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 20 of 20 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	48154
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	20
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 15 of 20 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	48153
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 20 of 20 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	14255
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/23/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	48151
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualar Creek at Highway 101]
Temporal Representation:	Data was collected on a single day 3/24/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	13784
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	41
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 36 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	28097
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	28098
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38998, Nitrate **Region 3**

Chualar Creek

LOE ID:	48152
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualar Creek at Highway 101]
Temporal Representation:	Data was collected on a single day 3/24/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	41927	Region 3
Chualar Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Four LOEs summarizes sediment samples. One sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and six additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess toxic effects in sediment samples. Four of the seven sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Eight LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and thirteen additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fifteen total samples are available to assess toxic effects in water samples. Fourteen of the fifteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of 15 water samples and four of seven sediment samples exceed the water quality objective for aquatic life protection and this exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by USEPA on October 7, 2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

This water body-pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41927, Toxicity — Region 3

Chualar Creek

LOE ID:	23837
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Chualar Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road].
Temporal Representation:	Data was collected on a single day 3/22/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41927, Toxicity — Region 3

Chualar Creek

LOE ID:	23840
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Chualar Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected on a single day 5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	23671
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-3/22/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	23841
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Chualar Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected on a single day 5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	23842
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring

	(R3_CMPnorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-3/22/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	23843
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are

	met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-3/22/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	23836
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Chualar Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road].
Temporal Representation:	Data was collected on a single day 3/22/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	23844
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-3/22/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	54085
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Thirteen samples were collected to evaluate water toxicity. Twelve of the thirteen samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. All five of the samples collected from station 309CCR were toxic to Ceriodaphnia dubia and two of those sampels were also toxic to Selenastrum capricornutum.Two of the three samples collected from station 309SOS were toxic to Ceriodaphnia dubia. All three of the sampels collected from station 309SBC were toxic to Ceriodaphnia dubia. Both of the samples collected from 309NOS were toxic to Ceriodaphnia dubia. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 309CRR-Chualar Creek (north branch) at Highway 101, 309NOS-Chualar Creek (north branch) at Old Stage Rd., 309SBC - Chualar Creek (south branch) west side hwy 101, and 309SOS - Chualar Creek (south branch) at Old Stage Road.
Temporal Representation:	The samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	54086
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate sediment toxicity. Three of the six samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Two of the three samples collected at station 309CCR and the single sample from 309SOS were toxic to Hyalella azteca. The single samples from station 309SOS and 309SBC did not result in significant toxic effects. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	

Spatial Representation:	The samples were collected at stations 309CRR and 309NOS on Chualar Creek north branch and at stations 309SBC and 309SOS on Chualar Creek south branch.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	78683
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Thirteen samples were collected to evaluate water toxicity. Twelve of the thirteen samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. All five of the samples collected from station 309CCR were toxic to Ceriodaphnia dubia and two of those sampels were also toxic to Selenastrum capricornutum.Two of the three samples collected from station 309SOS were toxic to Ceriodaphnia dubia. All three of the sampels collected from station 309SBC were toxic to Ceriodaphnia dubia. Both of the samples collected from 309NOS were toxic to Ceriodaphnia dubia. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 309CRR-Chualar Creek (north branch) at Highway 101, 309NOS-Chualar Creek (north branch) at Old Stage Rd., 309SBC - Chualar Creek (south branch) west side hwy 101, and 309SOS - Chualar Creek (south branch) at Old Stage Road.
Temporal Representation:	The samples were collected from January 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41927, Toxicity **Region 3**

Chualar Creek

LOE ID:	78682
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate sediment toxicity. Three of the six samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Two of the three samples collected at station 309CCR and the single sample from 309SOS were toxic to Hyalella azteca. The single samples from station 309SOS and 309SBC did not result in significant toxic effects. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at stations 309CRR and 309NOS on Chualar Creek north branch and at stations 309SBC and 309SOS on Chualar Creek south branch.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **47179** **Region 3**

Chualar Creek

Pollutant: **Bifenthrin**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. All of the samples collected were reported as Â‘non-detectedÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This is why the sample count shows zero. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples could be quantified and therefore did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47179, Bifenthrin **Region 3**

Chualar Creek

LOE ID:	53970
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47179, Bifenthrin **Region 3**

Chualar Creek

LOE ID:	53969
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).

Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 39063 Region 3

Chualar Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39063, Chlorophyll-a Region 3

Chualar Creek

LOE ID:	48138
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39063, Chlorophyll-a **Region 3**

Chualar Creek

LOE ID:	48139
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39063, Chlorophyll-a **Region 3**

Chualar Creek

LOE ID:	14553
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/23/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39063, Chlorophyll-a **Region 3**

Chualar Creek

LOE ID:	14552
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/23/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47180**	**Region 3**
Chualar Creek		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. All of the samples collected were reported as Â‘non-detectedÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This is why the sample count shows zero. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples could be quantified and therefore did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47180, Cyfluthrin **Region 3**

Chualar Creek

LOE ID:	53973
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47180, Cyfluthrin **Region 3**

Chualar Creek

LOE ID:	53974

Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**47181**	**Region 3**
Chualar Creek		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. All of the samples collected were reported as Â‘non-detectedÂ’ and the laboratory method detection limit was

above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This is why the sample count shows zero.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.
This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples could be quantified and therefore did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47181, Cyhalothrin, Lambda **Region 3**

Chualar Creek

LOE ID:	53975
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be

	considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47181, Cyhalothrin, Lambda **Region 3**

Chualar Creek

LOE ID:	53976
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	47182	Region 3
Chualar Creek		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. All of the samples collected were reported as Â‘non-detectedÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This is why the sample count shows zero. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples could be quantified and therefore did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47182, Cypermethrin	**Region 3**
Chualar Creek	

LOE ID:	53977
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the

	laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47182, Cypermethrin **Region 3**

Chualar Creek

LOE ID:	53978
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 47184 Region 3
Chualar Creek

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the evaluation guidelines (Chronic Value as defined in USEPA (1985) set to protect aquatic life and USEPA IRIS drinking water criteria). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47184, Dichlorvos Region 3
Chualar Creek

LOE ID:	54019
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47184, Dichlorvos **Region 3**

Chualar Creek

LOE ID:	54020
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47184, Dichlorvos **Region 3**

Chualar Creek

LOE ID:	54027
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is

	0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 47186 Region 3

Chualar Creek

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the USEPA drinking water life-time health advisory level. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 samples exceed the USEPA drinking water life-time health advisory level and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47186, Disulfoton Region 3

Chualar Creek

LOE ID:	54041
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**47187**	**Region 3**
Chualar Creek		

Pollutant:	**Dyfonate (Fonofos or Fonophos)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the Chronic Value as defined in USEPA 1985 Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 samples exceed the Chronic Value as defined in USEPA 1985 and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47187, Dyfonate (Fonofos or Fonophos) Region 3

Chualar Creek

LOE ID:	54043
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47187, Dyfonate (Fonofos or Fonophos) Region 3

Chualar Creek

LOE ID:	54042
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**47188**	**Region 3**
Chualar Creek		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the median lethal concentration (USEPA Office of Pesticide Programs, 2011) Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 16 samples exceed the USEPA Office of Pesticide Programs evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47188, Esfenvalerate/Fenvalerate **Region 3**

Chualar Creek

LOE ID:	54049
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47188, Esfenvalerate/Fenvalerate **Region 3**

Chualar Creek

LOE ID:	54050
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**47189**	**Region 3**
Chualar Creek		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the Chronic Value as defined in USEPA (1985). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 16 samples exceed the evaluation guideline
and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47189, Ethoprop **Region 3**

Chualar Creek

LOE ID:	54051
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47189, Ethoprop **Region 3**

Chualar Creek

LOE ID:	54052
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**47190**	**Region 3**
Chualar Creek		

Pollutant:	**Fenamiphos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the evaluation guidelines (USEPA median lethal concentration from the Office of Pesticide Programs Ecotoxicity database, set to protect aquatic life. Zero of the 16 samples exceed the USEPA drinking water life-time health advisory level for drinking water criteria).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 samples exceed the evaluation guidelines for aquatic life protection and drinking water and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47190, Fenamiphos **Region 3**

Chualar Creek

LOE ID:	54054
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard

	Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47190, Fenamiphos **Region 3**

Chualar Creek

LOE ID:	54055
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for fenamiphos is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47190, Fenamiphos **Region 3**

Chualar Creek

LOE ID:	54053
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**47192**	**Region 3**
Chualar Creek		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the evaluation guidelines (Chronic Value as defined in USEPA (1985) set to protect aquatic life. Zero of the 16 samples exceed the USEPA drinking water life-time health advisory level for drinking water criteria). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 16 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47192, Methidathion **Region 3**

Chualar Creek

LOE ID:	54060
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47192, Methidathion **Region 3**

Chualar Creek

LOE ID:	54059
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47192, Methidathion **Region 3**

Chualar Creek

LOE ID:	54061
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**47193**	**Region 3**
Chualar Creek		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the evaluation guidelines (CDFW, 1992) set to protect aquatic life. Zero of the 16 samples exceed the USEPA IRIS reference dose for drinking water criteria). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 16 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47193, Methyl Parathion	**Region 3**

Chualar Creek

LOE ID:	54062
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47193, Methyl Parathion **Region 3**

Chualar Creek

LOE ID:	54064
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use

	support and results are as follows: 0 of 16 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47193, Methyl Parathion **Region 3**

Chualar Creek

LOE ID:	54063
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.

Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 47183 Region 3

Chualar Creek

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. All of the samples collected were reported as Â‘non-detectedÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This is why the sample count shows zero. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples could be quantified and therefore did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47183, Permethrin, total Region 3

Chualar Creek

LOE ID:	54073

Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47183, Permethrin, total **Region 3**

Chualar Creek

LOE ID:	54072
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the

	laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**47194**	**Region 3**
Chualar Creek		

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the evaluation guidelines (median lethal concentration, USEPA Office of Pesticide Programs database) set to protect aquatic life. Zero of the 16 samples exceed the USEPA drinking national health advisory level for drinking water criteria). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 16 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47194, Phorate **Region 3**

Chualar Creek

LOE ID:	54081
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47194, Phorate **Region 3**

Chualar Creek

LOE ID:	54080
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47194, Phorate **Region 3**

Chualar Creek

LOE ID:	54079
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 47185 Region 3

Chualar Creek

Pollutant:	**Dimethoate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Nine of the 16 samples exceed the evaluation guidelines (USEPA median lethal concentration from the Office of Pesticide Programs Ecotoxicity database, set to protect aquatic life. Zero of the 16 samples exceed the California Department of Health Services notification level for drinking water criteria). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 16 samples exceed the evaluation guideline for aquatic life protection and this does exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47185, Dimethoate Region 3

Chualar Creek

LOE ID:	54028

Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 9 of 16 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47185, Dimethoate **Region 3**

Chualar Creek

LOE ID:	54029
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47185, Dimethoate **Region 3**

Chualar Creek

LOE ID:	54030
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	47191	Region 3
Chualar Creek		

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 3 samples exceed the evaluation guidelines (Palumbo et al., 2012), set to protect aquatic life. Zero of the 16 samples exceed the USEPA drinking water life-time health advisory level for drinking water criteria). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 3 samples exceed the evaluation guidelines (Palumbo et al., 2012), set to protect aquatic life and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47191, Malathion	**Region 3**
Chualar Creek	

LOE ID:	54058
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected and three of those sample results exceeded the guideline, however the remianing thirteen samples were non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47191, Malathion **Region 3**

Chualar Creek

LOE ID:	54057
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support. Sixteen samples were collected and three of those sample results exceeded the guideline, however the remianing thirteen samples were non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate

insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.

Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47191, Malathion **Region 3**

Chualar Creek

LOE ID:	54056
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [Chualar Creek - 309CRR]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID **42031** **Region 3**

Chualar Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants with twelve of sixteen samples exceeding the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twelve of 16 samples exceeded the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4.The Lower Salinas River Chlorpyrifos and Diazinon TMDL was approved by USEPA on 10/07/2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42031, Chlorpyrifos **Region 3**

Chualar Creek

LOE ID:	15094
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	16
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Chualar Creek to determine beneficial use support and results are as follows: 12 of 16 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR_DPR - Chualar Creek at Chualar River Rd., ca. 1.2 mi. from HWY 101 (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42031, Chlorpyrifos **Region 3**

Chualar Creek

LOE ID:	15093
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Chualar Creek to determine beneficial use support and results are as follows: 12 of 16 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR_DPR - Chualar Creek at Chualar River Rd., ca. 1.2 mi. from HWY 101 (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**41972**	**Region 3**
Chualar Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under 3.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 3.6, a minimum of two lines of evidence are needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The decision for the 2010 303(d) list used 0.16 ug/L (Siepmann and Finlayson, 2000) as the evaluation guideline and resulted in six out of sixteen samples exceeding this guideline. No new samples were evaluated during this listing cycle, however, 0.1 ug/L is now being used as the evaluation guideline (Finlayson, 2004), which resulted in thirteen out of sixteen samples exceeding the guideline. Using the evaluation guideline of 0.1 ug/L, thirteen of sixteen samples exceed the evaluation guideline set to protect for aquatic life beneficial uses. The decision remains unchanged.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by

RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Thirteen of 16 samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41972, Diazinon **Region 3**

Chualar Creek

LOE ID:	15132
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Chualar Creek to determine beneficial use support and results are as follows: 6 of 16 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR_DPR - Chualar Creek at Chualar River Rd., ca. 1.2 mi. from HWY 101 (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41972, Diazinon **Region 3**

Chualar Creek

LOE ID:	15131
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Chualar Creek to determine beneficial use support and results are as follows: 6 of 16 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR_DPR - Chualar Creek at Chualar River Rd., ca. 1.2 mi. from HWY 101 (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 6/16/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 38596 Region 3

Chualar Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping | Natural Sources
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. However, in accordance with section 2.2 of the Policy, there is now sufficient justification to place this water body-pollutant combination it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of sections 4.2 and 4.3 of the Policy. 2. The data used satisfies the data quantity requirements of sections 4.2 and 4.3 of the Policy. 3. Nineteen of 28 samples exceed the Water Contact Recreation objective; 10 of 28 samples exceed the Non-Contact Recreation objective and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by the USEPA on January 31, 2012. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. However, a TMDL has been approved since the last Listing Cycle and therefore this water body-pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List.

Line of Evidence (LOE) for Decision ID 38596, Escherichia coli (E. coli) — Region 3

Chualar Creek

LOE ID:	13659
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 19 of 28 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Chualar River Rd, Old Stage Rd, Foletta Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 10/30/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38596, Escherichia coli (E. coli) **Region 3**

Chualar Creek

LOE ID:	13675
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	28
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 10 of 28 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Chualar River Rd, Old Stage Rd, Foletta Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 10/30/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	39064	Region 3
Chualar Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping | Natural Sources
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. However, In accordance with section 2.2 of the Policy, there is now sufficient justification to place this water body-pollutant combination it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of sections 4.2 and 4.3 of the Policy. 2. The data used satisfies the data quantity requirements of sections 4.2 and 4.3 of the Policy. 3. Thirty of 41 samples exceed the Water Contact Recreation objective; 20 of 41 samples exceed the Non-Contact Recreation objective and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by the USEPA on January 31, 2012. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. However, a TMDL has been approved since the last Listing Cycle and therefore this water body-pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List.

Line of Evidence (LOE) for Decision ID 39064, Fecal Coliform	**Region 3**
Chualar Creek	

LOE ID:	13779
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	30
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 30 of 41 samples exceed the criterion for Coliform, Fecal.

Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]
Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39064, Fecal Coliform **Region 3**

Chualar Creek

LOE ID:	13780
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	20
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chualar Creek to determine beneficial use support and results are as follows: 20 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 4 monitoring sites [Foletta Rd, Chualar River Rd, Old Stage Rd, Chualar Canyon Rd]

Temporal Representation:	Data was collected over the time period 3/14/2001-12/17/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	38414	Region 3
Chualar Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Three water quality objectives are assessed. Six of 28 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 1 of the 28 samples also exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats and the dissolved oxygen levels are supporting the Warm beneficial use. Therefore, the use support rating for this pollutant is set at fully supporting.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 28 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by the USEPA on October 13, 2015.
5.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

This water body-pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 38414, Oxygen, Dissolved — Region 3

Chualar Creek

LOE ID:	48166
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 6 of 19 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38414, Oxygen, Dissolved — Region 3

Chualar Creek

LOE ID:	14670
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring

	(R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38414, Oxygen, Dissolved **Region 3**

Chualar Creek

LOE ID:	48167
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 6 of 19 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [

	309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38414, Oxygen, Dissolved **Region 3**

Chualar Creek

LOE ID:	14516
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38414, Oxygen, Dissolved **Region 3**

Chualar Creek

LOE ID:	14683
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38414, Oxygen, Dissolved **Region 3**

Chualar Creek

LOE ID:	48165
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 1 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38414, Oxygen, Dissolved **Region 3**

Chualar Creek

LOE ID:	48164
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chualar Creek to determine beneficial use support and results are as follows: 4 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 2 monitoring sites [309CRR - Chualar Creek at Highway 101, 309NOS - Chualar Creek north branch at Old Stage Rd.]
Temporal Representation:	Data was collected over the time period 4/6/2007-1/19/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38414, Oxygen, Dissolved **Region 3**

Chualar Creek

LOE ID:	14515
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Chualar Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chualar Creek was collected at 1 monitoring site [309CRR - Chualat Creek at River Road]
Temporal Representation:	Data was collected over the time period 2/17/2005-11/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Cassery Creek**
Water Body ID: **CAR3051001220080620141428**
Water Body Type: **River & Stream**

DECISION ID **38240** **Region 3**
Cassery Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: No new data were assessed. However, the pollutant name has been changed to Ammonia (from 'Nitrogen, ammonia (Total Ammonia)').

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample exceeds the Evaluation Guideline EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective, and did not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38240, Ammonia **Region 3**
Cassery Creek

LOE ID: 17436

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Cassery Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cassery Creek was collected at 1 monitoring site [Cassery Road (trib to Salsuipuedes Creek and College Lake]
Temporal Representation:	Data was collected on a single day 3/11/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**38241**	**Region 3**
Cassery Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the water quality objective for Municipal and Domestic Supply. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the water quality objective for Municipal and Domestic Supply, and did not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 38241, Nitrate **Region 3**

Cassery Creek

LOE ID:	17454
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Cassery Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cassery Creek was collected at 1 monitoring site [Cassery Road (trib to Salsuipuedes Creek and College Lake]
Temporal Representation:	Data was collected on a single day 3/11/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Bitterwater Canyon Creek**
Water Body ID: **CAR3170008320080611164322**
Water Body Type: **River & Stream**

DECISION ID **37244** **Region 3**
Bitterwater Canyon Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objectives for either Agricultural Supply or Muncipal and Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the water quality objectives for either Agricultural Supply or Muncipal and Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1..
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37244, Nitrate **Region 3**
Bitterwater Canyon Creek

LOE ID: 13781

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Bitterwater Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bitterwater Canyon Creek was collected at 1 monitoring site [Parkfield Rd]
Temporal Representation:	Data was collected over the time period 3/5/2001-3/6/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Bennett Slough**
Water Body ID: **CAR3060001420080611160605**
Water Body Type: **River & Stream**

DECISION ID **37220** **Region 3**
Bennett Slough

Pollutant: **Chlorophyll-a**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2018
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Forty-eight of the 234 samples exceed the evaluation guideline used to interpret the narrative water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-eight of the 234 samples exceed the evaluation guideline used to interpret the narrative water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37220, Chlorophyll-a **Region 3**
Bennett Slough

LOE ID: 52929

Pollutant: Chlorophyll-a
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	28
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 10 of 28 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37220, Chlorophyll-a **Region 3**

Bennett Slough

LOE ID:	52922
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 10 of 28 samples exceed the criterion for Chlorophyll a.

Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37220, Chlorophyll-a **Region 3**

Bennett Slough

LOE ID:	52821
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37220, Chlorophyll-a **Region 3**

Bennett Slough

LOE ID:	52814
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37220, Chlorophyll-a **Region 3**

Bennett Slough

LOE ID:	15225
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	153
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 35 of 153 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface

	water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306BENEH1 - Bennett Slough, East, 305BENSTP - GoMoss Landing, 306BENWH1 - Bennett Slough, West, 306BENJTR - Jetty Road, 306MSLSKL - Skipper's Landing]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37220, Chlorophyll-a **Region 3**

Bennett Slough

LOE ID:	15224
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	153
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 35 of 153 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306BENEH1 - Bennett Slough, East, 305BENSTP - GoMoss Landing, 306BENWH1 - Bennett Slough, West, 306BENJTR - Jetty Road, 306MSLSKL - Skipper's Landing]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37170**	**Region 3**
Bennett Slough		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Low dissolved oxygen in impacting two of the three aquatic life beneficial uses. Two hundred twenty six of 822 samples exceed the Cold Freshwater Habitat water quality objective for dissolved oxygen, and nine of 28 samples are exceed the Estuarine Habitat beneficial uses. However, 99 of the 822 samples exceed the Warm Freshwater Habitat water quality objective and this does not exceed the allowable frequency in the Listing policy and so the use support rating for dissolved oxygen and the Warm Freshwater Habitat use is set at Â‘fully supportingÂ’. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats, and Estuarine Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two hundred twenty six of 822 samples exceed the Cold Freshwater Habitat water quality objective for dissolved oxygen, nine of 28 sample are exceed the Estuarine Habitat and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved **Region 3**

Bennett Slough

LOE ID:	15062
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	443
Number of Exceedances:	112
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 112 of 443 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306BENJTR - Jetty Road, 306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved **Region 3**

Bennett Slough

LOE ID:	15308
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	794
Number of Exceedances:	94
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 94 of 794 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENJTR - Jetty Road, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved **Region 3**

Bennett Slough

LOE ID:	15307
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	794
Number of Exceedances:	217
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use

	support and results are as follows: 217 of 794 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENJTR - Jetty Road, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved **Region 3**

Bennett Slough

LOE ID:	15063
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	443
Number of Exceedances:	112
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 112 of 443 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306BENJTR - Jetty Road, 306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved **Region 3**

Bennett Slough

LOE ID:	52899
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 5 of 28 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved — Region 3

Bennett Slough

LOE ID:	52883
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	28
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 9 of 28 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved — Region 3

Bennett Slough

LOE ID:	52876
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 9 of 28 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved **Region 3**

Bennett Slough

LOE ID:	52865
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	28
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 9 of 28 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at

	Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved **Region 3**

Bennett Slough

LOE ID:	52850
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 9 of 28 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37170, Oxygen, Dissolved **Region 3**

Bennett Slough

LOE ID:	52860
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 9 of 28 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

DECISION ID	**37343**	**Region 3**
Bennett Slough		

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. Three-hundred-twelve of the 884 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and 422 of the 884 samples exceed the water quality objectives for Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section

303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three-hundred-twelve of the 884 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and 422 of the 884 samples exceed the water quality objectives for Recreation and these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37343, pH **Region 3**

Bennett Slough

LOE ID:	52901
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 15 of 28 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37343, pH **Region 3**

Bennett Slough

LOE ID:	52944
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	28
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 20 of 28 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37343, pH **Region 3**

Bennett Slough

LOE ID:	52937
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 20 of 28 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37343, pH **Region 3**

Bennett Slough

LOE ID:	52952
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 15 of 28 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S

QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37343, pH **Region 3**

Bennett Slough

LOE ID:	15155
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	856
Number of Exceedances:	297
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 297 of 856 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENJTR - Jetty Road, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37343, pH **Region 3**

Bennett Slough

LOE ID:	15158
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	856
Number of Exceedances:	297
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 297 of 856 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENJTR - Jetty Road, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37343, pH **Region 3**

Bennett Slough

LOE ID:	15157
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	856
Number of Exceedances:	402
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 402 of 856 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water

	Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENJTR - Jetty Road, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37343, pH **Region 3**

Bennett Slough

LOE ID:	15156
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	856
Number of Exceedances:	402
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 402 of 856 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENJTR - Jetty Road, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 46874 Region 3

Bennett Slough

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 48 nitrate samples exceed the water quality objective and 6 of the 81 nitrate/nitrite samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulatory substances. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 48 nitrate samples exceed the water quality objective and 6 of the 81 nitrate/nitrite samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulatory substances and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46874, Nitrate Region 3

Bennett Slough

LOE ID:	52867
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	81
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 6 of 81 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 46874, Nitrate **Region 3**

Bennett Slough

LOE ID:	52906
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	81
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 6 of 81 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 46874, Nitrate **Region 3**

Bennett Slough

LOE ID:	52832
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 3 of 48 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [305BENSTP - Bennett Slough at Struve Pond , 306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 46874, Nitrate **Region 3**

Bennett Slough

LOE ID:	52842
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 3 of 48 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [305BENSTP - Bennett Slough at Struve Pond , 306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

DECISION ID	**37275**	**Region 3**
Bennett Slough		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. A total of 114 of the 932 samples exceed the evaluation guideline (Moyle 1976) used to interpret the aquatic life water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 114 of the 932 samples exceed the evaluation guideline (Moyle 1976) used to interpret the aquatic life water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37275, Temperature, water **Region 3**

Bennett Slough

LOE ID:	52975
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 4 of 28 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37275, Temperature, water **Region 3**

Bennett Slough

LOE ID:	15242
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	904
Number of Exceedances:	110
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 110 of 904 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENJTR - Jetty Road, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	37291	Region 3
Bennett Slough		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. Two-hundred-eighty-none of 907 samples exceed the Evaluation Guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the Warm Freshwater Habitat water quality objective and 292 of 907 samples exceed the evaluation guideline (Sigler et al., 1984) used to interpret the Cold Freshwater Habitat water quality

objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two-hundred-eighty-none of 907 samples exceed the Evaluation Guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the Warm Freshwater Habitat water quality objective and 292 of 907 samples exceed the evaluation guideline (Sigler et al., 1984) used to interpret the Cold Freshwater Habitat water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37291, Turbidity **Region 3**

Bennett Slough

LOE ID:	15292
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	879
Number of Exceedances:	280
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 280 of 879 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENJTR - Jetty Road, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37291, Turbidity **Region 3**

Bennett Slough

LOE ID:	15277
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	879
Number of Exceedances:	280
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Bennett Slough to determine beneficial use support and results are as follows: 280 of 879 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 5 monitoring sites [306MSLSKL - Skipper's Landing, 305BENSTP - GoMoss Landing, 306BENJTR - Jetty Road, 306BENWH1 - Bennett Slough, West, 306BENEH1 - Bennett Slough, East]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37291, Turbidity — Region 3

Bennett Slough

LOE ID:	52967
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 9 of 28 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37291, Turbidity — Region 3

Bennett Slough

LOE ID:	52960
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Bennett Slough to determine beneficial use support and results are as follows: 12 of 28 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bennett Slough was collected at 4 monitoring sites [306BENEH1 - Bennett Slough East of Highway 1 , 306BENWH1 - Bennett Slough West of Highway 1 , 306BENJTR - Bennett Slough at Jetty Road , 305BENSTP - Bennett Slough at Struve Pond]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Beach Road Ditch**
Water Body ID: **CAR3051003020080603123839**
Water Body Type: **River & Stream**

DECISION ID **37634** **Region 3**
Beach Road Ditch

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, the pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the previously approved decision for total ammonia.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. None of the 1206 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 1206 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37634, Ammonia **Region 3**
Beach Road Ditch

LOE ID: 17818

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1204
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 1204 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 18 monitoring sites [BR-FGB - Beach Road Ditch Below Flapgates, BR-FGA - Beach Road Ditch @ Above Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2, BR-BAY BR-TE1 BR-TE2 BR-VD1 BR-VD2 BR-VD3 BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37634, Ammonia **Region 3**

Beach Road Ditch

LOE ID:	17585
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 1 monitoring site [305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37634, Ammonia **Region 3**

Beach Road Ditch

LOE ID:	17604
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 1 monitoring site [305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected on a single day 5/26/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	37564	Region 3
Beach Road Ditch		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 4 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 4 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37564, Escherichia coli (E. coli)	**Region 3**
Beach Road Ditch	

LOE ID:	18333
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37564, Escherichia coli (E. coli) Region 3

Beach Road Ditch

LOE ID:	18334
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37564, Escherichia coli (E. coli) **Region 3**

Beach Road Ditch

LOE ID:	18557
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 1 monitoring site [305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected on a single day 5/26/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37564, Escherichia coli (E. coli) **Region 3**

Beach Road Ditch

LOE ID:	18558
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 1 monitoring site [305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected on a single day 5/26/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37457**	**Region 3**
Beach Road Ditch		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. 138 out of 1139 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. 138 out of 1139 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37457, Temperature, water — Region 3

Beach Road Ditch

LOE ID:	17417
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1135
Number of Exceedances:	137
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 137 of 1135 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 13 monitoring sites [BR-FGB - Beach Road Ditch Below Flapgates, BR-FGA - Beach Road Ditch @ Above Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2, BR-BAY BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37457, Temperature, water — Region 3

Beach Road Ditch

LOE ID:	18766
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37580**	**Region 3**
Beach Road Ditch		

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. A total of 1079 out of 1226 samples exceed the water quality objective for Municipal and Domestic Supply. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. The sample exceedance rate supports rejection of the null hypothesis.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 1079 out of 1226 samples exceed the water quality objective for Municipal and Domestic Supply and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37580, Nitrate **Region 3**

Beach Road Ditch

LOE ID:	17726
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1222
Number of Exceedances:	1075
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 1075 of 1222 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 18 monitoring sites [BR-FGA - Beach Road Ditch @ Above Flapgates, BR-FGB - Beach Road Ditch Below Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2,

	BR-BAY BR-TE1 BR-TE2 BR-VD1 BR-VD2 BR-VD3 BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37580, Nitrate **Region 3**

Beach Road Ditch

LOE ID:	17994
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Beach Road Ditch to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 1 monitoring site [305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected on a single day 5/26/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37580, Nitrate **Region 3**

Beach Road Ditch

LOE ID:	18129
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37407**	**Region 3**
Beach Road Ditch		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. A total of 427 out of 1085 samples exceed the water quality objective for protection of Cold Freshwater Habitat. In addition, 247 of 1085 samples exceed the water quality objective for protection of Warm Freshwater

Habitat. These rates of exceedance are greater than the allowable frequency listed in Table 3.2 of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 427 out of 1085 samples exceed the water quality objective for protection of Cold Freshwater Habitat. In addition, 247 of 1085 samples exceed the water quality objective for protection of Warm Freshwater Habitat. Each of these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37407, Oxygen, Dissolved **Region 3**

Beach Road Ditch

LOE ID:	18177
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37407, Oxygen, Dissolved **Region 3**

Beach Road Ditch

LOE ID:	17859
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1081
Number of Exceedances:	427
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 427 of 1081 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 16 monitoring sites [BR-FGA - Beach Road Ditch @ Above Flapgates, BR-FGB - Beach Road Ditch Below Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2, BR-BAY BR-TE1 BR-TE2 BR-TMC BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37407, Oxygen, Dissolved **Region 3**

Beach Road Ditch

LOE ID:	17872
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1081
Number of Exceedances:	247
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 247 of 1081 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 16 monitoring sites [BR-FGA - Beach Road Ditch @ Above Flapgates, BR-FGB - Beach Road Ditch Below Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2, BR-BAY BR-TE1 BR-TE2 BR-TMC BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37407, Oxygen, Dissolved **Region 3**

Beach Road Ditch

LOE ID:	18176
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	37468	Region 3
Beach Road Ditch		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. 101 out of 191 samples exceeded the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This Evaluation Guideline is relevant for Beach Road Ditch as it is a tributary to Pajaro River (via Watsonville Slough). A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Pajaro River as having "Definite run or population". Therefore, discharge of turbid water from Beach Road Ditch is specifically prohibited by the General Objectives in the Central Coast Water Quality Control Plan which states that waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 101 out of 191 samples exceeded the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this meets or exceeds the allowable frequency listed in Table

3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37468, Turbidity **Region 3**

Beach Road Ditch

LOE ID:	16929
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	191
Number of Exceedances:	101
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 101 of 191 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 6 monitoring sites [BR-FGB - Beach Road Ditch Below Flapgates, BR-FGA - Beach Road Ditch @ Above Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management]
Temporal Representation:	Data was collected over the time period 9/21/2005-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37468, Turbidity **Region 3**

Beach Road Ditch

LOE ID:	16942
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	191
Number of Exceedances:	101
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 101 of 191 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 6 monitoring sites [BR-FGB - Beach Road Ditch Below Flapgates, BR-FGA - Beach Road Ditch @ Above Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management]
Temporal Representation:	Data was collected over the time period 9/21/2005-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **37592** **Region 3**

Beach Road Ditch

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Two-hundred and six of the 1167 samples exceed the Warm and Cold Freshwater Habitat objectives. Three hundred

thiry three of the 1167 samples exceed the Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two-hundred and six of the 1167 samples exceed the Warm and Cold Freshwater Habitat objectives. Three hundred thiry three of the 1167 samples exceed the Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation andd this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	17650
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1163
Number of Exceedances:	332
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 332 of 1163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 16 monitoring sites [BR-FGA - Beach Road Ditch @ Above Flapgates, BR-FGB - Beach Road Ditch Below Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach

	Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2, BR-BAY BR-TE1 BR-TE2 BR-TMC BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	17649
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1163
Number of Exceedances:	332
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 332 of 1163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 16 monitoring sites [BR-FGA - Beach Road Ditch @ Above Flapgates, BR-FGB - Beach Road Ditch Below Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2, BR-BAY BR-TE1 BR-TE2 BR-TMC BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	19062

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	19066
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	19065
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	19063
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	19064
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Beach Road Ditch to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 2 monitoring sites [305-BEACH-21 - Beach Road Ditch at Palm Beach, 305-BEACH-21 - Beach Road Ditch at Palm Beach]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	17648
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1163
Number of Exceedances:	332
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 332 of 1163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 16 monitoring sites [BR-FGA - Beach Road Ditch @ Above Flapgates, BR-FGB - Beach Road Ditch Below Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch

	at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2, BR-BAY BR-TE1 BR-TE2 BR-TMC BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	17651
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1163
Number of Exceedances:	206
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 206 of 1163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 16 monitoring sites [BR-FGA - Beach Road Ditch @ Above Flapgates, BR-FGB - Beach Road Ditch Below Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2, BR-BAY BR-TE1 BR-TE2 BR-TMC BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37592, pH **Region 3**

Beach Road Ditch

LOE ID:	17634
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1163
Number of Exceedances:	206
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Beach Road Ditch to determine beneficial use support and results are as follows: 206 of 1163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Beach Road Ditch was collected at 16 monitoring sites [BR-FGA - Beach Road Ditch @ Above Flapgates, BR-FGB - Beach Road Ditch Below Flapgates, BR-CUL - Beach Road Ditch Culvert Outflow, BR-WS3 - Beach Road Ditch at Well Stand #3, BR-WS2 - Beach Road Ditch atWell Stand #2, BR-WMI - Beach Road Ditch at Waste Management, BR-THU - Beach Road Ditch Thurwatcher Rd., BR-PAN - Beach Road Ditch Panabaker Rd., BR-WS1 - Beach Road Ditch atWell Stand #1, BR-DW3 - Beach Road Ditch near Well Stand #3, BR-DW2 - Beach Road Ditch near Well Stand #2, BR-BAY BR-TE1 BR-TE2 BR-TMC BR-AWM]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arroyo Seco Creek**
Water Body ID: **CAR3041205320080603113613**
Water Body Type: **River & Stream**

DECISION ID **37588** **Region 3**
Arroyo Seco Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the 8 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and the water quality objective for Non-Contact Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 8 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and the water quality objective for Non-Contact Recreation, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37588, Escherichia coli (E. coli) **Region 3**
Arroyo Seco Creek

LOE ID: 18298

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff, 304-ARROY-22 - Delaware Ave]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37588, Escherichia coli (E. coli) **Region 3**

Arroyo Seco Creek

LOE ID:	18297
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff, 304-ARROY-22 - Delaware Ave]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 36604 **Region 3**

Arroyo Seco Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the eight samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the eight samples exceed the Municipal and Domestic Supply water quality objective. and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36604, Nitrate **Region 3**

Arroyo Seco Creek

LOE ID:	18342
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff, 304-ARROY-22 - Delaware Ave]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**36602**	**Region 3**
Arroyo Seco Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 8 samples exceed the Evaluation Guideline set to protect for Cold Freshwater Habitat, and 0 of the 8 samples exceed the Evaluation Guideline set to protect for Warm Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 8 samples exceed the Cold Freshwater Habitat water quality objective and 0 of the 8 samples exceed the Warm Freshwater Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36602, Oxygen, Dissolved **Region 3**

Arroyo Seco Creek

LOE ID:	18022
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 1 monitoring site [304-ARROY-21 - Meder Park]

Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36602, Oxygen, Dissolved **Region 3**

Arroyo Seco Creek

LOE ID:	18172
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-22 - Delaware Ave, 304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36602, Oxygen, Dissolved **Region 3**

Arroyo Seco Creek

LOE ID:	18171
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-22 - Delaware Ave, 304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36602, Oxygen, Dissolved **Region 3**

Arroyo Seco Creek

LOE ID:	18021
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 1 monitoring site [304-ARROY-21 - Meder Park]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 36663 Region 3

Arroyo Seco Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 9 samples exceed the Evaluation Guideline set to protect for Cold Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 9 samples exceed the Evaluation Guideline set to protect for Cold Freshwater Habitat and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36663, Temperature, water Region 3

Arroyo Seco Creek

LOE ID:	18750
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff, 304-ARROY-22 - Delaware Ave]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**36672**	**Region 3**
Arroyo Seco Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 11 samples exceed the Municipal & Domestic, Water Body Contact and Non-Contact Recreation. Two of 11 samples exceed the Cold and Warm Benecial use criteria. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 11 samples exceed the Municipal & Domestic, Water Body Contact and Non-Contact Recreation. Two of 11 samples exceed the Cold and Warm Benecial use criteria. The sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36672, pH **Region 3**

Arroyo Seco Creek

LOE ID:	19108
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-22 - Delaware Ave, 304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36672, pH **Region 3**

Arroyo Seco Creek

LOE ID:	19109
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-22 - Delaware Ave, 304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36672, pH **Region 3**

Arroyo Seco Creek

LOE ID:	19111
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-22 - Delaware Ave, 304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36672, pH **Region 3**

Arroyo Seco Creek

LOE ID:	19110
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-22 - Delaware Ave, 304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36672, pH **Region 3**

Arroyo Seco Creek

LOE ID:	19127
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Seco Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco Creek was collected at 3 monitoring sites [304-ARROY-22 - Delaware Ave, 304-ARROY-21 - Meder Park, 304-ARROY-23 - West Cliff]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arroyo Laguna**
Water Body ID: **CAR3101302220080605170618**
Water Body Type: **River & Stream**

DECISION ID **37383** **Region 3**
Arroyo Laguna

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Both of the samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Neither of the samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Both of the samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Neither of the samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37383, Escherichia coli (E. coli) **Region 3**
Arroyo Laguna

LOE ID: 18559

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Laguna to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Laguna was collected at 1 monitoring site [310-LAGUN-41 - Arroyo Laguna]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37383, Escherichia coli (E. coli) **Region 3**

Arroyo Laguna

LOE ID:	18560
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Laguna to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Laguna was collected at 1 monitoring site [310-LAGUN-41 - Arroyo Laguna]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37827 Region 3

Arroyo Laguna

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceeded the water quality objective for Cold Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37827, Oxygen, Dissolved Region 3

Arroyo Laguna

LOE ID:	18003
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Laguna to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Laguna was collected at 1 monitoring site [310-LAGUN-41 - Arroyo Laguna]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37894**	**Region 3**
Arroyo Laguna		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37894, Temperature, water **Region 3**

Arroyo Laguna

LOE ID:	18580
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Laguna to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Laguna was collected at 1 monitoring site [310-LAGUN-41 - Arroyo Laguna]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38085** **Region 3**

Arroyo Laguna

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. A single line of evidence is available in the administrative record to assess this pollutant. Both samples exceed the water quality objective for Shellfish Harvesting. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Both samples exceed the water quality objective for Shellfish Harvesting. and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38085, Total Coliform **Region 3**

Arroyo Laguna

LOE ID:	17460
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Laguna to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Laguna was collected at 1 monitoring site [310-LAGUN-41 - Arroyo Laguna]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38096 Region 3

Arroyo Laguna

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeds the water quality objectives for Cold Freshwater Habitat, Water Contact Recreation and Non-Contact Recreation. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeds the water quality objectives for Cold Freshwater Habitat, Water Contact Recreation and Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38096, pH Region 3

Arroyo Laguna

LOE ID:	18668
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Laguna to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Laguna was collected at 1 monitoring site [310-LAGUN-41 - Arroyo Laguna]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38096, pH **Region 3**

Arroyo Laguna

LOE ID:	18669
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Laguna to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Laguna was collected at 1 monitoring site [310-LAGUN-41 - Arroyo Laguna]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38096, pH **Region 3**

Arroyo Laguna

LOE ID:	18684
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo Laguna to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Laguna was collected at 1 monitoring site [310-LAGUN-41 - Arroyo Laguna]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arroyo del Puerto**
Water Body ID: **CAR3101302120080605170819**
Water Body Type: **River & Stream**

DECISION ID **37157** **Region 3**
Arroyo del Puerto

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the two samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2..
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37157, Escherichia coli (E. coli) **Region 3**
Arroyo del Puerto

LOE ID: 18515

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37157, Escherichia coli (E. coli) Region 3

Arroyo del Puerto

LOE ID:	18514
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 36684 Region 3

Arroyo del Puerto

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the two samples exceed the water quality objective for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the water quality objectives for Municipal and Domestic Supply, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36684, Nitrate Region 3

Arroyo del Puerto

LOE ID:	18309
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**36754**	**Region 3**
Arroyo del Puerto		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceeded the water quality objectives for Cold or Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36754, Oxygen, Dissolved **Region 3**

Arroyo del Puerto

LOE ID:	18139
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36754, Oxygen, Dissolved **Region 3**

Arroyo del Puerto

LOE ID:	18140
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	37766	Region 3
Arroyo del Puerto		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. A single line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37766, Temperature, water **Region 3**

Arroyo del Puerto

LOE ID:	18729
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	37812	Region 3
Arroyo del Puerto		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation or Water Contact Recreation. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation or Water Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37812, pH	**Region 3**
Arroyo del Puerto	

LOE ID:	18961
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37812, pH **Region 3**

Arroyo del Puerto

LOE ID:	18959
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37812, pH **Region 3**

Arroyo del Puerto

LOE ID:	18979
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37812, pH **Region 3**

Arroyo del Puerto

LOE ID:	18978
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and

	results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37812, pH **Region 3**

Arroyo del Puerto

LOE ID:	18960
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo del Puerto to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo del Puerto was collected at 1 monitoring site [310-ARROY-41 - Arroyo del Puerto at bridge in San Simeon]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)**
Water Body ID: **CAX3153402020021001211616**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **44600** **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant: **Total Coliform**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

The sample size for the geometric mean for dry weather total coliform sampling (LOE 31453) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 22 samples is needed to determine if a beneficial use is supported using the AB 411 binomial table specific to listing coastal beaches (www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303d_binomial_tables.xls). Therefore, the use support rating is set to 'insufficient information'.

Nine lines of evidence are available in the administrative record to assess this pollutant. Eleven of 165 samples exceeded the geometric mean standard for total coliform (LOEs 19389 and 56091), 21 of 300 samples exceeded the single sample maximum for total coliform (LOEs 19388 and 56089), and 2 of 298 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19390 and 56090) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The data associated with the original listing (LOE 3980 - placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is being fully supported.

This water body segment is identified as an AB411 beach so data collected during the time frame of April 1st to October 31st (dry weather) was also assessed using a four percent exceedance percentage (section 3.3 of Listing Policy). There are two lines of evidence for dry weather single sample and geometric mean calculations. Two of 19 samples exceeded the geometric mean standard for total coliform (LOE 31453) and 3 of 90 samples exceeded the single sample maximum for total coliform (LOE 31452).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 19 samples exceeded the geometric mean standard for total coliform for dry weather sampling (April 1 - October 31, LOE 31453) and 3 of 90 samples exceeded the single sample maximum for total coliform for dry weather sampling (April 1 - October 31, LOE 31452), neither of these exceed the four percent exceedance percentage criteria in the AB411 binomial table for coastal beaches described in section 4.3 of the Listing Policy for the water contact recreation water quality

objective.
4. Eleven of 165 samples exceeded the geometric mean standard for total coliform (LOEs 19389 and 56091), 21 of 300 samples exceeded the single sample maximum for total coliform (LOEs 19388 and 56089), and 2 of 298 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19390 and 56090) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44600, Total Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	56091
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 133 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Carpinteria State station.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44600, Total Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	56089
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	145
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 145 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County) was collected at 1 monitoring site [Carpinteria State]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44600, Total Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	56090
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 145 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Carpinteria State station.

Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44600, Total Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	31452
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2004 through October 2006. A total of 90 dry month (April through October) single samples were collected with 3 samples exceeding the water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44600, Total Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	3980
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44600, Total Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	31453
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2004 through October 2006. A total of 90 dry month (April through October) single samples were collected with 19 dry month geomeans calculated. Two of the 19 geomeans exceeded the geomean water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44600, Total Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	19388
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â to determine beneficial use support and results are as follows: 14 of 155 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44600, Total Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	19390
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â to determine beneficial use support and results are as follows: 2 of 153 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44600, Total Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	19389
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â to determine beneficial use support and results are as follows: 4 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 44058 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

It should be noted that the data collected between 2007 and 2010 are E. coli results that are evaluated using the Ocean Plan Objective for Fecal Coliform. This objective is higher than the USEPA recreation criteria for E. coli. Evaluation of the data using the Fecal Coliform Objective could result in an erroneous decision to remove the beach segment from the 303(d) List and are not used here as the basis of a decision to de-list.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 165 samples exceeded the geometric mean standard for fecal coliform (LOEs 19324 and 56088) and 9 of 299 samples exceeded the single sample maximum for fecal coliform (LOEs 19363 and 56087) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The data associated with the original listing (LOE 3979 - placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is being fully supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Although zero of 165 samples exceeded the geometric mean standard for fecal coliform (LOEs 19324 and 56088) and 9 of 299 samples exceeded the single sample maximum for fecal coliform (LOEs 19363 and 56087) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy, some of these data are for E. coli and are incorrectly compared to the Fecal Coliform Objective. Therefore the decision must remain Do Not De-List..
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) List because applicable water quality standards for the pollutant are not used in this assessment. Some of the data included here are

E. coli data and those data should not be assessed using the Fecal Coliform Objective

Line of Evidence (LOE) for Decision ID 44058, Fecal Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	56087
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County) and results are as follows: 2 of 145 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County) was collected at 1 monitoring site [Carpinteria State]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44058, Fecal Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	56088
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 133 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Carpinteria State station.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44058, Fecal Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	19324
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one AB411 monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411

	monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44058, Fecal Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	19363
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	154
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â to determine beneficial use support and results are as follows: 7 of 154 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one AB411 monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44058, Fecal Coliform **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	3979
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 50088 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50088, Arsenic **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77399
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County) to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	50090	Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50090, Cadmium **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77373
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water

	Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	**50092**	**Region 3**
Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50092, Chlordane **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77376
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is

a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/

QAPP Information Reference(s):

DECISION ID 47883 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47883, Chlorpyrifos Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77377
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50094 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50094, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77378
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50096 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50096, Dieldrin Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77380

Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50098 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50098, Endosulfan **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77381
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50100 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50100, Endrin **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77382
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **44605** **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant: **Enterococcus**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean for dry weather enterococcus sampling (LOE 31450) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 22 samples is needed to determine if a beneficial use is supported using the AB411 binomial table specific to listing coastal beaches (www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303d_binomial_tables.xls). Therefore, the use support rating is set to 'insufficient information'. Six lines of evidence are available in the administrative record to assess this pollutant. Thirteen of 165 samples exceeded the geometric mean standard for enterococcus (LOEs 19364 and 56086) and 25 of 300 samples exceeded the single sample maximum for enterococcus (LOEs 19365 and 56085) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). This water body segment is identified as an AB411 beach so data collected during the time frame of April 1st to October 31st (dry weather) was also assessed using a four percent exceedance percentage (section 3.3 of Listing Policy). There are two lines of evidence for dry weather single sample and geometric mean calculations. One of 19 samples exceeded the geometric mean standard for enterococcus (LOE 31450) and 7 of 90 samples exceeded the single sample maximum for enterococcus (LOE 31451). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 19 samples exceeded the geometric mean standard for enterococcus for dry weather sampling (April 1 - October 31, LOE 31450) and 7 of 90 samples exceeded the single sample maximum for enterococcus for dry weather sampling (April 1 - October 31, LOE 31451), neither of these exceed the four percent exceedance percentage criteria described in section 3.3 of the Listing Policy for the water contact recreation water quality objective. 4. Thirteen of 165 samples exceeded the geometric mean standard for enterococcus (LOEs 19364 and 56086) and 25 of 300 samples exceeded the single sample maximum for enterococcus (LOEs 19365 and 56085) for the water contact recreation water quality standard. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. .
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44605, Enterococcus **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	56086
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 133 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Carpinteria State station.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44605, Enterococcus **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	56085
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 145 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County) was collected at 1 monitoring site [Carpinteria State]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44605, Enterococcus **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	19364
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â to determine beneficial use support and results are as follows: 5 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one AB411 monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44605, Enterococcus **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	31450
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2004 through October 2006. A total of 90 dry month (April through October) single samples were collected with 19 dry month geomeans calculated. One of the 19 geomeans exceeded the geomean water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one AB411 monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44605, Enterococcus **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	19365
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â to determine beneficial use support and results are as follows: 17 of 155 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for

	Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one AB411 monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44605, Enterococcus **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	31451
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2004 through October 2006. A total of 90 dry month (April through October) single samples were collected with 7 samples exceeding the water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)Â was collected at one AB411 monitoring site (Carpinteria State)
Temporal Representation:	Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 50102 **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50102, Heptachlor epoxide — Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77400
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50103 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50103, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77401
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	

QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50104 **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50104, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77383
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50105 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single

shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50105, Mirex **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77402
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	**50107**	**Region 3**
Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50107, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77403
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50108** **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50108, PCBs (Polychlorinated biphenyls) **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77404
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to

	levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50109 Region 3

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50109, Selenium **Region 3**

Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)

LOE ID:	77405
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CPSB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 1/7/2008.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Carpinteria City Beach (Santa Barbara County)**
Water Body ID: **CAX31534020200210012108 01**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37018** **Region 3**
Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Five of 125 samples exceeded the geometric mean standard for enterococcus (LOEs 19294 and 56079) and 15 of 243 samples exceeded the single sample maximum for enterococcus (LOEs 19295 and 56078) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 125 samples exceeded the geometric mean standard for enterococcus (LOEs 19294 and 56079) and 15 of 243 samples exceeded the single sample maximum for enterococcus (LOEs 19295 and 56078) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37018, Enterococcus **Region 3**
Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID: 19295

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 9 of 147 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) was collected at one AB411 monitoring site (Carpinteria City)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37018, Enterococcus **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID:	19294
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) was collected at one AB411 monitoring site (Carpinteria City)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37018, Enterococcus **Region 3**
Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID: 56078

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 96
Number of Exceedances: 6

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 96 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) was collected at 1 monitoring site [Carpinteria City]
Temporal Representation: Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37018, Enterococcus **Region 3**
Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID: 56079

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 93 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that fecal coliform density shall not exceed 35 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Carpinteria City.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 36343 Region 3

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 125 samples exceeded the geometric mean standard for fecal coliform (LOEs 19292 and 56081) and 0 of 242 samples exceeded the single sample maximum for fecal coliform (LOEs 19293 abd 56080) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 125 samples exceeded the geometric mean standard for fecal coliform (LOEs 19292 and 56081) and 0 of 242 samples exceeded the single sample maximum for fecal coliform (LOEs 19293 abd 56080) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36343, Fecal Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID:	56080
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Carpinteria City Beach (Santa Barbara County) and results are as follows: 0 of 96 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) was collected at 1 monitoring site [Carpinteria City]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36343, Fecal Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID:	56081
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	93
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 93 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Carpinteria City.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36343, Fecal Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID:	19292
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara

	County) was collected at one AB411 monitoring site (Carpinteria City)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36343, Fecal Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID:	19293
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 146 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) was collected at one AB411 monitoring site (Carpinteria City)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37090 **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Three of 125 samples exceeded the geometric mean standard for total coliform (LOEs 19297 and 56083), 5 of 243 samples exceeded the single sample maximum for total coliform (LOEs 19296 and 56082), and 0 of 241 exceeded the fecal coliform/total coliform ratio criteria (LOEs 19298 and 56084) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 125 samples exceeded the geometric mean standard for total coliform (LOEs 19297 and 56083), 5 of 243 samples exceeded the single sample maximum for total coliform (LOEs 19296 and 56082), and 0 of 241 exceeded the fecal coliform/total coliform ratio criteria (LOEs 19298 and 56084) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37090, Total Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID:	19297
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) was collected at one monitoring site (Carpinteria City)

Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37090, Total Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID: 19298

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 145

Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 145 samples exceed the criterion for Coliform, Total.

Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) was collected at one monitoring site (Carpinteria City)

Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37090, Total Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID: 19296

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 147 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) was collected at one monitoring site (Carpinteria City)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37090, Total Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID:	56084
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 96 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected at Carpinteria City.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37090, Total Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID: 56083

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 93
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 93 geomeans exceeded the total coliform objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Carpinteria City.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37090, Total Coliform **Region 3**

Pacific Ocean at Carpinteria City Beach (Santa Barbara County)

LOE ID: 56082

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 96
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's

	Environmental Health Department for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 96 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carpinteria City Beach (Santa Barbara County) was collected at 1 monitoring site [Carpinteria City]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Point Rincon (mouth of Rincon Cr, Santa Barbara County)**
Water Body ID: **CAX3153401220000326134941**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **33953** **Region 3**
Pacific Ocean at Point Rincon (mouth of Rincon Cr, Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This water segment / pollutant combination is being delisted because the monitoring station associated with this decision is location in Ventura County (Region 4). The data associated with this listing are being assessed under the Water Segment called "Rincon Beach" , and water body ID CAX4010001020020131134348
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it is being assessed under the Water Segment called "Rincon Beach" , and water body ID CAX4010001020020131134348

Line of Evidence (LOE) for Decision ID 33953, Fecal Coliform **Region 3**
Pacific Ocean at Point Rincon (mouth of Rincon Cr, Santa Barbara County)

LOE ID:	3991
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified

Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 33954 Region 3

Pacific Ocean at Point Rincon (mouth of Rincon Cr, Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This water segment / pollutant combination is being delisted because the monitoring station associated with this decision is location in Ventura County (Region 4). The data associated with this listing are being assessed under the Water Segment called "Rincon Beach" , and water body ID CAX4010001020020131134348
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because it is being assessed under the Water Segment called "Rincon Beach" , and water body ID CAX4010001020020131134348

Line of Evidence (LOE) for Decision ID 33954, Total Coliform Region 3

Pacific Ocean at Point Rincon (mouth of Rincon Cr, Santa Barbara County)

LOE ID:	3992
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified

Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Hammonds Beach (Santa Barbara County)**
Water Body ID: **CAX3153301020021002211858**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **43433** **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

It should be noted that the data collected between 2007 and 2010 are E. coli results that are evaluated using the Ocean Plan Objective for Fecal Coliform. This objective is higher than the USEPA recreation criteria for E. coli. Evaluation of the data using the Fecal Coliform Objective could result in an erroneous decision to remove the beach segment from the 303(d) List and are not used here as the basis of a decision to de-list.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 160 samples exceeded the geometric mean standard for fecal coliform (LOEs 19246 and 56213) and 5 of 290 samples exceeded the single sample maximum for fecal coliform (LOEs 19247 and 56212) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The data associated with LOE 3985 (placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is being fully supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Although zero of 160 samples exceeded the geometric mean standard for fecal coliform (LOEs 19246 and 56213) and 5 of 290 samples exceeded the single sample maximum for fecal coliform (LOEs 19247 and 56212) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy, some of these data are for E. coli and are incorrectly compared to the Fecal Coliform Objective. Therefore the decision must remain Do Not De-List..
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) List because applicable water quality standards for the pollutant are not used in this assessment. Some of the data included here are

E. coli data and those data should not be assessed using the Fecal Coliform Objective.

Line of Evidence (LOE) for Decision ID 43433, Fecal Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	3985
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43433, Fecal Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	19246
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hammonds Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at one AB411 monitoring site (Hammonds)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43433, Fecal Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	19247
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	150
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hammonds Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 150 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at one AB411 monitoring site (Hammonds)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43433, Fecal Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	56213
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Hammonds.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43433, Fecal Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	56212
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Hammonds Beach (Santa Barbara County) and results are as follows: 2 of 140 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at 1 monitoring site [Hammonds]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 36732 **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Forty eight of 150 samples (LOE 25356) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 160 samples exceeded the geometric mean standard for total coliform (LOEs 19311 and 56215), 10 of 290 samples exceeded the single sample maximum for total coliform (LOEs 19250 and 56214), and 0 of 289 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19312 and 56216) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty eight of 150 samples (LOE 25356) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36732, Total Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	56216
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 140 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Hammonds.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36732, Total Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	56214
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Hammonds Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 140 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density

	shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at 1 monitoring site [Hammonds]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36732, Total Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	56215
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Hammonds station.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36732, Total Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	19311
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hammonds Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at one monitoring site (Hammonds)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36732, Total Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	19312
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hammonds Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 149 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at one monitoring site (Hammonds)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36732, Total Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	19250
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	150
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hammonds Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 9 of 150 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at one monitoring site (Hammonds)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36732, Total Coliform **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	25356

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	150
Number of Exceedances:	48
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data for this line of evidence was collected at Pacific Ocean at Hammonds Beach (Santa Barbara County) at one AB 411 site (Hammonds Beach) weekly between January 2004 and December 2006. Forty-eight of 150 samples exceed the Ocean Plan Objective for Shellfish Harvesting.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that not more than 10 percent of the total coliform samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence was collected at Pacific Ocean at Hammonds Beach (Santa Barbara County) at one AB 411 site (Hammonds Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006
Environmental Conditions:	
QAPP Information:	No QA information available
QAPP Information Reference(s):	

DECISION ID 36731 Region 3

Pacific Ocean at Hammonds Beach (Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twelve of 160 samples exceeded the geometric mean standard for enterococcus (LOEs 19248 and 56211) and 17 of 291 samples exceeded the single sample maximum for enterococcus (LOEs 19249 and 56210) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of 160 samples exceeded the geometric mean standard for enterococcus (LOEs 19248 and 56211) and 17 of 291 samples exceeded the single sample maximum for enterococcus (LOEs 19249 and 56210) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36731, Enterococcus **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	56211
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 128 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Hammonds.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36731, Enterococcus **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	56210
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	140
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Hammonds Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 140 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at 1 monitoring site [Hammonds]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36731, Enterococcus **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	19248
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hammonds Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at one AB411 monitoring site (Hammonds)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36731, Enterococcus **Region 3**

Pacific Ocean at Hammonds Beach (Santa Barbara County)

LOE ID:	19249
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hammonds Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 10 of 151 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hammonds Beach (Santa Barbara County) was collected at one AB411 monitoring site (Hammonds)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)**
Water Body ID: **CAX3153201220021002193849**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36689** **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Eighteen of 157 samples exceeded the geometric mean standard for enterococcus (LOEs 19583 and 56208) and 21 of 288 samples exceeded the single sample maximum for enterococcus (LOEs 19584 and 56207) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four lines of evidence are available in the administrative record to assess this pollutant. Eighteen of 157 samples exceeded the geometric mean standard for enterococcus (LOEs 19583 and 56208) and 21 of 288 samples exceeded the single sample maximum for enterococcus (LOEs 19584 and 56207) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 36689, Enterococcus **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID: 19584

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 15 of 151 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at one AB411 monitoring site (East Beach Sycamore Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36689, Enterococcus **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	19583
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at one AB411 monitoring site (East Beach Sycamore Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36689, Enterococcus **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	56207
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 137 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at 1 monitoring site [East Beach Sycamore Creek]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36689, Enterococcus **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	56208
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	125
Number of Exceedances:	11
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eleven of the 125 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station East Beach Sycamore Creek.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37524 Region 3

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Eighteen of 137 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Five of 157 samples exceeded the geometric mean standard for total coliform (LOEs 19586 and 56232), 8 of 288 samples exceeded the single sample maximum for total coliform (LOEs 19585 and 56231), and 2 of 287 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19587 and 56233) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).The data associated with the original listing (LOE 3983 - placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is being fully supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d)

list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of 137 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Five of 157 samples exceeded the geometric mean standard for total coliform (LOEs 19586 and 56232), 8 of 288 samples exceeded the single sample maximum for total coliform (LOEs 19585 and 56231), and 2 of 287 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19587 and 56233) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 37524, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	56233
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 137 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station East Beach Sycamore Creek.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37524, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	56230
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	137
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 18 of 137 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at 1 monitoring site [East Beach Sycamore Creek]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37524, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	56232
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	125
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 125 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at station East Beach Sycamore Creek.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37524, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID: 56231

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 137
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 137 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at 1 monitoring site [East Beach Sycamore Creek]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37524, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID: 3983

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37524, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	19587
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	150
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 150 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at one monitoring site (East Beach Sycamore Creek)

Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37524, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	19586
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at one monitoring site (East Beach Sycamore Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37524, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	19585
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151

Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 151 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at one monitoring site (East Beach Sycamore Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37437 Region 3

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 157 samples exceeded the geometric mean standard for fecal coliform (LOEs 19581 and 56229) and 6 of 287 samples exceeded the single sample maximum for fecal coliform (LOEs 19582 and 56209) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 157 samples exceeded the geometric mean standard for fecal coliform (LOEs 19581 and 56229) and 6 of 287 samples exceeded the single sample maximum for fecal coliform (LOEs 19582 and 56209) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37437, Fecal Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	19581
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at one AB411 monitoring site (East Beach Sycamore Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37437, Fecal Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	19582
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	150
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 150 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at one AB411 monitoring site (East Beach Sycamore Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37437, Fecal Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID:	56209
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) and results are as follows: 0 of 137 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County) was collected at 1 monitoring site [East Beach Sycamore Creek]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37437, Fecal Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Sycamore Creek, Santa Barbara County)

LOE ID: 56229

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 125
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 125 geomeans exceeded the objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at station East Beach Sycamore Creek.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Butterfly Beach (Santa Barbara County)**
Water Body ID: **CAX31532012200210012037 35**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36186** **Region 3**
Pacific Ocean at Butterfly Beach (Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One of 158 samples exceeded the geometric mean standard for enterococcus and 15 of 286 samples exceeded the single sample maximum for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 158 samples exceeded the geometric mean standard for enterococcus and 15 of 286 samples exceeded the single sample maximum for enterococcus and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36186, Enterococcus **Region 3**
Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID: 56053

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	138
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 138 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at 1 monitoring site [Butterfly Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36186, Enterococcus **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	56054
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 126 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Butterfly Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.

Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch progam by Santa Barbara County,Environmental Health Services.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36186, Enterococcus **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID: 19267

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 148
Number of Exceedances: 10

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 10 of 148 samples exceed the criterion for Enterococci.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at one AB411 monitoring site (Butterfly Beach)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36186, Enterococcus **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID: 19242

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
Number of Exceedances: 1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at one AB411 monitoring site (Butterfly Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36170 Region 3

Pacific Ocean at Butterfly Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 158 samples exceeded the geometric mean standard for fecal coliform and 3 of 285 samples exceeded the single sample maximum for fecal coliform (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 158 samples exceeded the geometric mean standard for fecal coliform and 3 of 285 samples exceeded the single sample maximum for fecal coliform and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36170, Fecal Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	19240
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at one AB411 monitoring site (Butterfly Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36170, Fecal Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	19241
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	3

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 147 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at one AB411 monitoring site (Butterfly Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36170, Fecal Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	56055
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Butterfly Beach (Santa Barbara County) and results are as follows: 0 of 138 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County)

	was collected at 1 monitoring site [Butterfly Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36170, Fecal Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	56056
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 126 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed 200/100 mL. California Ocean Plan (SWRCB 2006)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Butterfly Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	These samples were collected for the Beach Watch progam for Santa Barbara County,Environmental Health Services.
QAPP Information Reference(s):	

DECISION ID 36316 **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Eleven of 138 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 158 samples exceeded the geometric mean standard for total coliform (LOEs 19269 and 56059), 7 of 286 samples exceeded the single sample maximum for total coliform (LOEs 19268 and 56058), and 0 of 284 exceeded the fecal coliform/total coliform ratio criteria (LOEs 19270 and 56060) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 138 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 158 samples exceeded the geometric mean standard for total coliform (LOEs 19269 and 56059), 7 of 286 samples exceeded the single sample maximum for total coliform (LOEs 19268 and 56058), and 0 of 284 exceeded the fecal coliform/total coliform ratio criteria (LOEs 19270 and 56060) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36316, Total Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	56060
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 138 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Butterfly Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.

Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch progam for Santa Barbara County,Environmental Health Services.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36316, Total Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID: 56058

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 138 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at 1 monitoring site [Butterfly Beach]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36316, Total Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID: 56057

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 138
Number of Exceedances: 11

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 138 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at 1 monitoring site [Butterfly Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36316, Total Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	56059
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 126 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Butterfly Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam for Santa Barbara County,Environmental Health Services.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36316, Total Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	19268
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	148
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 148 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at one monitoring site (Butterfly Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36316, Total Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	19269
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Coliform, Total.

Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at one monitoring site (Butterfly Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36316, Total Coliform **Region 3**

Pacific Ocean at Butterfly Beach (Santa Barbara County)

LOE ID:	19270
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Butterfly Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 146 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Butterfly Beach (Santa Barbara County) was collected at one monitoring site (Butterfly Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Leadbetter Beach (Santa Barbara County)**
Water Body ID: **CAX31532011200210022145 53**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38758** **Region 3**
Pacific Ocean at Leadbetter Beach (Santa Barbara County)

Pollutant: **Total Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. One hundred four of 298 samples (LOEs 25567 and 56310) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Five of 167 samples exceeded the geometric mean standard for total coliform (LOEs 19513 and 56313), 3 of 298 samples exceeded the single sample maximum for total coliform (LOEs 19512 and 56311), and 5 of 296 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19514 and 56312) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred four of 298 samples (LOEs 25567 and 56310) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38758, Total Coliform **Region 3**
Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID: 25567

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	151
Number of Exceedances:	58
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data for this line of evidence was collected by County of Santa Barbara staff at one site located at Leadbetter Beach (Santa Barbara County) between January 2004 and December 2006. Fifty-eight of 151 samples exceed the California Ocean Plan Objective for Shellfish Harvesting.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that not more than 10 percent of the total coliform samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence was collected at Pacific Ocean at Leadbetter Beach (Santa Barbara County) at one AB 411 site (Leadbetter Beach).
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006.
Environmental Conditions:	
QAPP Information:	No QA Information is available.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38758, Total Coliform **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	19512
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 151 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at one monitoring site (Leadbetter)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38758, Total Coliform **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	19514
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	149
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 149 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at one monitoring site (Leadbetter)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38758, Total Coliform **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	19513
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at one monitoring site (Leadbetter)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38758, Total Coliform **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	56312
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 147 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total

	coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Leadbetter.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38758, Total Coliform **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	56310
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	147
Number of Exceedances:	46
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 46 of 147 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at 1 monitoring site [Leadbetter]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38758, Total Coliform **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	56311
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 147 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at 1 monitoring site [Leadbetter]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38758, Total Coliform **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	56313
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	135
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 135 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at station Leadbetter.
Temporal Representation: The samples were collected approximately once a month from January 2007 to August 2010.

Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

DECISION ID 38453 Region 3

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of 167 samples exceeded the geometric mean standard for fecal coliform (LOEs 19508 and 56309) and 6 of 297 samples exceeded the single sample maximum for fecal coliform (LOEs 19509 and 56308) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 167 samples exceeded the geometric mean standard for fecal coliform (LOEs 19508 and 56309) and 6 of 297 samples exceeded the single sample maximum for fecal coliform (LOEs 19509 and 56308) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38453, Fecal Coliform Region 3

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID: 19509

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	150
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 150 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at one AB411 monitoring site (Leadbetter)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38453, Fecal Coliform **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	19508
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at one AB411 monitoring site (Leadbetter)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38453, Fecal Coliform **Region 3**
Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID: 56308

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 147
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Leadbetter Beach (Santa Barbara County) and results are as follows: 2 of 147 samples exceed the criterion for Coliform, Fecal.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at 1 monitoring site [Leadbetter]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38453, Fecal Coliform **Region 3**
Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID: 56309

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	135
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 2 of the 135 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Leadbetter.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38482 Region 3

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Eighty eight of 505 samples exceeded the geometric mean standard for enterococcus (LOEs 3507, 19510, and 56295) and 75 of 650 samples exceeded the single sample maximum for enterococcus (LOEs 3507, 19511, and 56294) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The counts above include data summarized in LOE 3507 which describes two separate measurements for enterococcus (72 of 338 samples exceeded the geometric mean standard for enterococcus and 49 of 352 samples exceeded the single sample maximum for enterococcus) for the water contact recreation water quality standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighty eight of 505 samples exceeded the geometric mean standard for enterococcus and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38482, Enterococcus **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	56294
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 147 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at 1 monitoring site [Leadbetter]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38482, Enterococcus **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	56295
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	135
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the 135 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Leadbetter.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38482, Enterococcus **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	3507
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	690
Number of Exceedances:	121
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Available data indicate sufficient exceedances of bacterial indicator objectives. There were 49 out of 352 samples exceeding the single sample maximum for enterococci, and 72 out of 338 exceedances of the geomean for enterococci (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters.

	Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters; or (B) 200 fecal coliform bacteria per 100 milliliters; or (C) 35 enterococcus bacteria per 100 milliliters. (DHS, 1999)
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Station ID# SBC12
Temporal Representation:	06/28/1999-10/31/2005
Environmental Conditions:	
QAPP Information:	Data record: 1999-2005, Santa Barbara County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38482, Enterococcus **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	19510
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at one AB411 monitoring site (Leadbetter)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38482, Enterococcus **Region 3**

Pacific Ocean at Leadbetter Beach (Santa Barbara County)

LOE ID:	19511
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Leadbetter Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 14 of 151 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Leadbetter Beach (Santa Barbara County) was collected at one AB411 monitoring site (Leadbetter)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)**
Water Body ID: **CAX3153201120020107160116**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37572** **Region 3**
Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Forty six of 273 samples exceeded the geometric mean standard for enterococcus (LOEs 19557 and 56444) and 79 of 329 samples exceeded the single sample maximum for enterococcus (LOEs 19558 and 56443) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty six of 273 samples exceeded the geometric mean standard for enterococcus (LOEs 19557 and 56444) and 79 of 329 samples exceeded the single sample maximum for enterococcus (LOEs 19558 and 56443) for the water contact recreation water quality standard and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37572, Enterococcus **Region 3**
Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID: 19558

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	176
Number of Exceedances:	57
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 57 of 176 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at one AB411 monitoring site (East Beach- Mission Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37572, Enterococcus **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	19557
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 15 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus

	shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at one AB411 monitoring site (East Beach- Mission Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37572, Enterococcus **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	56444
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	141
Number of Exceedances:	31
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty-one of the 141 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station East Beach- Mission Creek.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37572, Enterococcus **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	56443
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	22
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 22 of 153 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at 1 monitoring site [East Beach- Mission Creek]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37280 Region 3

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. It should be noted that the data collected between 2007 and 2010 are E. coli results that are evaluated using the Ocean Plan Objective for Fecal Coliform. This objective is higher than the USEPA recreation criteria for E. coli. Evaluation of the data using the Fecal Coliform Objective could result in an erroneous decision to remove the beach segment from the 303(d) List and are not used here as the basis of a decision to de-list. Five lines of evidence are available in the administrative record to assess this pollutant. Eight of 173 samples exceeded the geometric mean standard for fecal coliform (LOEs 19555 and 56446) and 45 of 328 samples exceeded the single sample maximum for fecal coliform (LOEs 19556 and 56445) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of

California, SWRCB, 2005). The data associated with the original listing (LOE 3981 - placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is being fully supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Although 8 of 173 samples exceeded the geometric mean standard for fecal coliform (LOEs 19555 and 56446) and 45 of 328 samples exceeded the single sample maximum for fecal coliform (LOEs 19556 and 56445) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy, some of these data are for E. coli and are incorrectly compared to the Fecal Coliform Objective. Therefore the decision must remain Do Not De-List..
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) List because applicable water quality standards for the pollutant are not used in this assessment. Some of the data included here are E. coli data and those data should not be assessed using the Fecal Coliform Objective.

Line of Evidence (LOE) for Decision ID 37280, Fecal Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	56446
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	141
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 1 of the 141 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station East Beach- Mission Creek.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37280, Fecal Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	56445
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) and results are as follows: 11 of 153 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at 1 monitoring site [East Beach- Mission Creek]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37280, Fecal Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	3981
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37280, Fecal Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	19555
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at one AB411 monitoring site (East Beach- Mission Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37280, Fecal Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	19556
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	175
Number of Exceedances:	34
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 34 of 175 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at one AB411 monitoring site (East Beach- Mission Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 34621 **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Sixty four of 153 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Thirty four of 173 samples exceeded the geometric mean standard for total coliform (LOEs 19560 and 56205), 44 of 329 samples exceeded the single sample maximum for total coliform (LOEs 19559 and 56204), and 20 of 327 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19561 and 56206) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).The data associated with the original listing (LOE 3982 - placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is not being fully supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty four of 153 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Thirty four of 173 samples exceeded the geometric mean standard for total coliform (LOEs 19560 and 56205) for the water contact recreation water quality standard and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34621, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	19561
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	174
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 10 of 174 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at one monitoring site (East Beach- Mission Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34621, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	19559
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	176
Number of Exceedances:	33
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 33 of 176 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at one monitoring site (East Beach- Mission Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34621, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	19560
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at one monitoring site (East Beach- Mission Creek)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34621, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	3982
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34621, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	56204
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 153 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at 1 monitoring site [East Beach- Mission Creek]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34621, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	56447
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	153
Number of Exceedances:	64
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 64 of 153 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County) was collected at 1 monitoring site [East Beach- Mission Creek]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34621, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	56205
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	141
Number of Exceedances:	23
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-three of the 141 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station East Beach- Mission Creek.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34621, Total Coliform **Region 3**

Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)

LOE ID:	56206
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Ten of the 153 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station East Beach- Mission Creek.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Hope Ranch Beach (Santa Barbara County)**
Water Body ID: **CAX3153201020021002213053**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **43659** **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

It should be noted that some , if not all, of the data associated with this decision are E. coli results that are evaluated using the Ocean Plan Objective for Fecal Coliform. This objective is higher than the USEPA recreation criteria for E. coli. Evaluation of the data using the Fecal Coliform Objective could result in an erroneous decision to remove the beach segment from the 303(d) List and are not used here as the basis of a decision to de-list.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 166 samples exceeded the geometric mean standard for fecal coliform (LOEs 19430 and 56262) and 4 of 292 samples exceeded the single sample maximum for fecal coliform (LOEs 19431 and 56261) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The data associated with LOE 3986 (placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is being fully supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Although zero of 166 samples exceeded the geometric mean standard for fecal coliform (LOEs 19430 and 56262) and 4 of 292 samples exceeded the single sample maximum for fecal coliform (LOEs 19431 and 56261) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy, some of these data are for E. coli and are incorrectly compared to the Fecal Coliform Objective. Therefore the decision must remain Do Not De-List..
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) List because applicable water quality standards for the pollutant are not used in this assessment. Some of the data included here are

E. coli data and those data should not be assessed using the Fecal Coliform Objective.

Line of Evidence (LOE) for Decision ID 43659, Fecal Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	3986
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43659, Fecal Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	19430
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at one AB411 monitoring site (Hope Ranch Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43659, Fecal Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	19431
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 146 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at one AB411 monitoring site (Hope Ranch Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43659, Fecal Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	56261
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Hope Ranch Beach (Santa Barbara County) and results are as follows: 2 of 146 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at 1 monitoring site [Hope Ranch Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43659, Fecal Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	56262
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 134 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Hope Ranch Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37563 Region 3

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Seventy two of 293 samples (LOEs 25579 and 56263) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 166 samples exceeded the geometric mean standard for total coliform (LOEs 19454 and 56278), 4 of 293 samples exceeded the single sample maximum for total coliform (LOEs 19434 and 56276), and 1 of 291 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19455 and 56277) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy two of 293 samples (LOEs 25579 and 56263) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37563, Total Coliform Region 3

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	56277
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 146 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Hope Ranch Beach.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37563, Total Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	56278
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 134 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at station Hope Ranch Beach.
Temporal Representation: The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37563, Total Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID: 56276

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 146
Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 146 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at 1 monitoring site [Hope Ranch Beach]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37563, Total Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID: 56263

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	146
Number of Exceedances:	28
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 28 of 146 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at 1 monitoring site [Hope Ranch Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37563, Total Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	19455
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 145 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at one monitoring site (Hope Ranch Beach)

Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37563, Total Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID: 19454

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at one monitoring site (Hope Ranch Beach)

Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37563, Total Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID: 19434

Pollutant: Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 147 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at one monitoring site (Hope Ranch Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37563, Total Coliform **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	25579
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	147
Number of Exceedances:	44
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data for this line of evidence was collected weekly bye County of Santa Barbara Staff at one AB 411 site (Hope Ranch Beach)between January 2004 and December 2006. Forty-four of 147 samples exceed the Ocean Plan Objective for Shellfish Harvesting.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that not more than 10 percent of the total

	coliform samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence was collected at Pacific Ocean at Hope Ranch Beach (Santa Barbara County) at one AB 411 site (Hope Ranch Beach).
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006
Environmental Conditions:	
QAPP Information:	No QA information is available
QAPP Information Reference(s):	

DECISION ID 37562 Region 3

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eighteen of 166 samples exceeded the geometric mean standard for enterococcus (LOEs 19432 and 56260) and 24 of 293 samples exceeded the single sample maximum for enterococcus (LOEs 19433 and 56259) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighteen of 166 samples exceeded the geometric mean standard for enterococcus (LOEs 19432 and 56260) and 24 of 293 samples exceeded the single sample maximum for enterococcus (LOEs 19433 and 56259) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37562, Enterococcus Region 3

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	19433
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	147
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 147 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at one AB411 monitoring site (Hope Ranch Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37562, Enterococcus **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	19432
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus

	shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at one AB411 monitoring site (Hope Ranch Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37562, Enterococcus **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	56259
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 146 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Hope Ranch Beach (Santa Barbara County) was collected at 1 monitoring site [Hope Ranch Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37562, Enterococcus **Region 3**

Pacific Ocean at Hope Ranch Beach (Santa Barbara County)

LOE ID:	56260
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	13
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirteen of the 134 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Hope Ranch Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)**
Water Body ID: **CAX31532010200201071553 47**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36328** **Region 3**
Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fifty of 182 samples exceeded the geometric mean standard for enterococcus and 50 of 333 samples exceeded the single sample maximum for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty of 182 samples exceeded the geometric mean standard for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36328, Enterococcus **Region 3**
Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	19578
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 12 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at one AB411 monitoring site (Arroyo Burro)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36328, Enterococcus **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	19579
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	171
Number of Exceedances:	31
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 31 of 171 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at one AB411 monitoring site (Arroyo Burro)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36328, Enterococcus **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID: 56042

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 150
Number of Exceedances: 38

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Thirty eight of the 150 geomeans exceeded the enterococcus objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the enterococcus density shall not exceed 35 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Arroyo Burro.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36328, Enterococcus **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID: 56041

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	162
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 19 of 162 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at 1 monitoring site [Arroyo Burro]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 34640 Region 3

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Ninety five of the 162 samples exceed the shellfish harvesting water quality objective. Fifty four of 182 samples exceeded the geometric mean standard for total coliform (LOEs 19601 and 56014) , 41 of 333 samples exceeded the single sample maximum for total coliform (LOEs 19580 and 56012), and 15 of 331 samples the fecal to the total coliform ratio criteria (LOEs 19602 and 56013) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ninety five of the 162 samples exceed the shellfish harvesting water quality objective and 54 of 182 samples exceeded the geometric mean standard for total coliform for the water contact recreation water quality standard. These both exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34640, Total Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	56012
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	162
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 17 of 162 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at 1 monitoring site [Arroyo Burro]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34640, Total Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	56014
Pollutant:	Total Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	150
Number of Exceedances:	39
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Thirty nine of the 150 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Arroyo Burro.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34640, Total Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	56013
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	162
Number of Exceedances:	12
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twelve of the 162 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Arroyo Burro.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	

QAPP Information:	The samples were collected for the Beach Watch progam for Santa Barbara County, Environmental Health Services.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34640, Total Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	56045
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	162
Number of Exceedances:	95
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 95 of 162 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at 1 monitoring site [Arroyo Burro]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34640, Total Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	19580
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	171
Number of Exceedances:	24
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 24 of

	171 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at one monitoring site (Arroyo Burro)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34640, Total Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	3978
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34640, Total Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	19602
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	169
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 169 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at one monitoring site (Arroyo Burro)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34640, Total Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	19601
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 15 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at one monitoring site (Arroyo Burro)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36214 Region 3

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eight of 182 samples exceeded the geometric mean standard for fecal coliform and 26 of 332 samples exceeded the single sample maximum for fecal coliform (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of 182 samples exceeded the geometric mean standard for fecal coliform and 26 of 332 samples exceeded the single sample maximum for fecal coliform (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36214, Fecal Coliform Region 3

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	56044
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	150
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 7 of the 150 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Arroyo Burro.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36214, Fecal Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	56043
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	162
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) and results are as follows: 15 of 162 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density

	shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at 1 monitoring site [Arroyo Burro]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36214, Fecal Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	19576
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at one AB411 monitoring site (Arroyo Burro)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36214, Fecal Coliform **Region 3**

Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)

LOE ID:	19577
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	170
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 170 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Burro Beach (Santa Barbara County) was collected at one AB411 monitoring site (Arroyo Burro)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)**
Water Body ID: **CAX31531020200210022257 53**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37717** **Region 3**
Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Eight of 159 samples exceeded the geometric mean standard for enterococcus (LOEs 20009 and 56419) and 9 of 282 samples exceeded the single sample maximum for enterococcus (LOEs 20010 and 56418) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 159 samples exceeded the geometric mean standard for enterococcus (LOEs 20009 and 56419) and 9 of 282 samples exceeded the single sample maximum for enterococcus (LOEs 20010 and 56418) for the water contact recreation water quality standard and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37717, Enterococcus **Region 3**
Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID: 20010

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	143
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 143 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at one AB411 monitoring site (Sands at Coal Oil Point)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37717, Enterococcus **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID:	20009
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at one AB411 monitoring site (Sands at Coal Oil Point)

Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37717, Enterococcus **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID: 56419

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 127
Number of Exceedances: 7

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Seven of the 127 geomeans exceeded the entercoccus objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.

Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Sands at Coal Oil Point.
Temporal Representation: Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37717, Enterococcus **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID: 56418

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 139
Number of Exceedances: 6

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 139 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at 1 monitoring site [Sands at Coal Oil Point]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37671 Region 3

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 159 samples exceeded the geometric mean standard for fecal coliform (LOEs 19998 and 56421) and 1 of 281 samples exceeded the single sample maximum for fecal coliform (LOEs 19999 and 56420) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 159 samples exceeded the geometric mean standard for fecal coliform (LOEs 19998 and 56421) and 1 of 281 samples exceeded the single sample maximum for fecal coliform (LOEs 19999 and 56420) for the water contact recreation water quality standard and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37671, Fecal Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID:	56420
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) and results are as follows: 0 of 139 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at 1 monitoring site [Sands at Coal Oil Point]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37671, Fecal Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID:	56421
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	127
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 127 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sands at Coal Oil Point.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37671, Fecal Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID:	19998
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at one AB411 monitoring site (Sands at Coal Oil Point)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411

	monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37671, Fecal Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID:	19999
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	142
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 142 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at one AB411 monitoring site (Sands at Coal Oil Point)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38502 **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Eleven of 137 samples (LOE 56422) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 159 samples exceeded the geometric mean standard for total coliform (LOEs 20170 and 56424), 4 of 282 samples exceeded the single sample maximum for total coliform (LOEs 20011 and 56423), and 0 of 141 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20171) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 137 samples (LOE 56422) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). One of 159 samples exceeded the geometric mean standard for total coliform (LOEs 20170 and 56424), 4 of 282 samples exceeded the single sample maximum for total coliform (LOEs 20011 and 56423), and 0 of 141 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20171) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38502, Total Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID:	20170
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at one monitoring site (Sands at Coal Oil Point)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38502, Total Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID: 20171

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 141
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 141 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at one monitoring site (Sands at Coal Oil Point)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38502, Total Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID: 20011

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	143
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 143 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at one monitoring site (Sands at Coal Oil Point)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38502, Total Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID:	56424
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	127
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 127 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Sands at Coal Oil Point.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38502, Total Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID:	56422
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	139
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 139 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at 1 monitoring site [Sands at Coal Oil Point]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38502, Total Coliform **Region 3**

Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County)

LOE ID:	56423
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 139 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sands Beach--Coal Oil Point (Santa Barbara County) was collected at 1 monitoring site [Sands at Coal Oil Point]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Goleta Beach (Santa Barbara County)**
Water Body ID: **CAX3153102020021002211230**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38527** **Region 3**
Pacific Ocean at Goleta Beach (Santa Barbara County)

Pollutant: **Total Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. One hundred three of 304 samples (LOEs 25355 and 56168) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Three of 171 samples exceeded the geometric mean standard for total coliform (LOEs 19214 and 56170), 8 of 304 samples exceeded the single sample maximum for total coliform (LOEs 19213 and 56169), and 6 of 302 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19215 and 56171) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred three of 304 samples (LOEs 25355 and 56168) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38527, Total Coliform **Region 3**
Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID: 56171

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 151 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Goleta Beach.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38527, Total Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	56170
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 139 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at station Goleta Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38527, Total Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	56168
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	151
Number of Exceedances:	45
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 45 of 151 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at 1 monitoring site [Goleta Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38527, Total Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	56169
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 151 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at 1 monitoring site [Goleta Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38527, Total Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	25355
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	153
Number of Exceedances:	58
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Data for this line of evidence was collected at Pacific Ocean at Goleta Beach (Santa Barbara County) at one AB 411 site (Goleta Beach) weekly between January 2004 and December 2006. Fifty-eight of 153 samples exceed the water quality objective for Shellfish Harvesting.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that not more than 10 percent of the total coliform samples shall exceed 230 per 100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence was collected at Pacific Ocean at Goleta Beach (Santa Barbara County) at one AB 411 site (Goleta Beach).

Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006.
Environmental Conditions:	
QAPP Information:	County of Santa Barbara Environmental Health Department QA information not available.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38527, Total Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	19214
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at one monitoring site (Goleta Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38527, Total Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	19213
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	8

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 153 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at one monitoring site (Goleta Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38527, Total Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	19215
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 151 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at one monitoring site (Goleta Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 47154 Region 3

Pacific Ocean at Goleta Beach (Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The pollutant name has been changed to Â‘EnterococcusÂ’ from previous assessments in which the generic Â‘Indicator BacteriaÂ’ pollutant name was used. In the 2010 assessment cycle decision # 5893 resulted in removing this water body from the 303(d) list because the number of exceedances did not exceed the allowable frequency listed in Table 4.2 of the Listing Policy. This current decision summarizes all the data from decision from #5893 in addition to new data from the current listing cycle. The sample size for the geometric mean for dry weather enterococcus sampling (LOE 31445) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 22 samples is needed to determine if a beneficial use is supported using the AB411 binomial table specific to listing coastal beaches (www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303d_binomial_tables.xls). Therefore, the use support rating is set to 'insufficient information'. Seven lines of evidence are available in the administrative record to assess this pollutant. LOE 3504 (for Indicator Bacteria) describes two separate measurements for enterococcus where 72 of 339 samples exceeded the geometric mean standard for enterococcus and 39 of 358 samples exceeded the single sample maximum for enterococcus for the water contact recreation water quality standard. When added to the other LOEs, a total of 81 of 510 samples exceeded the geometric mean standard for enterococcus (LOEs 3504, 19190, and 56155) and 61 of 662 samples exceeded the single sample maximum for enterococcus (LOEs 3504, 19212, and 56154) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). This water body segment is identified as an AB411 beach so data collected during the time frame of April 1st to October 31st (dry weather) was also assessed using a four percent exceedance percentage (section 3.3 of Listing Policy). There are two lines of evidence for dry weather single sample and geometric mean calculations. Three of 92 samples exceeded the single sample maximum for enterococcus (LOE 31444) and zero of 19 samples exceeded the geometric mean for enterococcus (LOE 31445). Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for adding this water segment-pollutant combination to the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighty one of 510 samples exceeded the geometric mean standard for enterococcus (LOEs 3504, 19190, and 56155), 61 of 662 samples exceeded the single sample maximum for enterococcus (LOEs

3504, 19212, and 56154) for the water contact recreation water quality standard and neither of these exceed the allowable frequency listed in Table 3.2 and of the Listing Policy.
4. Three of 92 samples exceeded the single sample maximum for enterococcus (LOE 31444) and 0 of 19 samples exceeded the geometric mean for enterococcus (LOE 31445) collected during the time frame of April 1st to October 31st (dry weather) assessment and neither of these exceed the four percent exceedance percentage criteria described in section 3.3 of the Listing Policy for the water contact recreation water quality objective.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47154, Enterococcus **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	56154
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 151 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at 1 monitoring site [Goleta Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47154, Enterococcus **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	56155

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 139 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Goleta Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47154, Enterococcus **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	19212
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 14 of 153 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at one AB411 monitoring site (Goleta Beach)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 47154, Enterococcus **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID: 31444

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 92
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Data was collected from April 2004 through October 2006. A total of 92 dry month (April through October) single samples were collected with 3 samples exceeding the water quality objective.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: AB 411-California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at one AB411 monitoring site (Goleta Beach)
Temporal Representation: Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 47154, Enterococcus **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID: 3504

Pollutant: Indicator Bacteria
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	339
Number of Exceedances:	72
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Available data indicate sufficient exceedances of bacterial indicator objectives. There were 39 out of 358 exceedances of the single sample maximum for enterococci, 72 out of 339 exceedances of the geomean for enterococci, and 14 out of 339 exceedances of the geomean for fecal coliform (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters. Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters; or (B) 200 fecal coliform bacteria per 100 milliliters; or (C) 35 enterococcus bacteria per 100 milliliters. (DHS, 1999)
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Station ID# SBC9
Temporal Representation:	06/28/1999-10/31/2005
Environmental Conditions:	
QAPP Information:	Data record: 1999-2005, Santa Barbara County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47154, Enterococcus **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	19190
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 32 samples exceed the criterion for Enterococci.

Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at one AB411 monitoring site (Goleta Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47154, Enterococcus **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	31445
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2004 through October 2006. A total of 83 dry month (April through October) single samples were collected with 19 dry month geomeans calculated. Zero of the 19 geomeans exceeded the geomean water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Ab 411- California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at one AB411 monitoring site (Goleta Beach)
Temporal Representation:	Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38601 Region 3

Pacific Ocean at Goleta Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eleven of 171 samples exceeded the geometric mean standard for fecal coliform (LOEs 19188 and 56157) and 19 of 303 samples exceeded the single sample maximum for fecal coliform (LOEs 19189 abd 56156) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four lines of evidence are available in the administrative record to assess this pollutant. Eleven of 171 samples exceeded the geometric mean standard for fecal coliform (LOEs 19188 and 56157) and 19 of 303 samples exceeded the single sample maximum for fecal coliform (LOEs 19189 abd 56156) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38601, Fecal Coliform Region 3

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	19188
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at one AB411 monitoring site (Goleta Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38601, Fecal Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	19189
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	152
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Goleta Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 152 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at one AB411 monitoring site (Goleta Beach)

Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38601, Fecal Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	56157
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 10 of the 139 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Goleta Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38601, Fecal Coliform **Region 3**

Pacific Ocean at Goleta Beach (Santa Barbara County)

LOE ID:	56156
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's

	Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Goleta Beach (Santa Barbara County) and results are as follows: 14 of 151 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Goleta Beach (Santa Barbara County) was collected at 1 monitoring site [Goleta Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Jalama Beach (Santa Barbara County)**
Water Body ID: **CAX31510051200201071556 08**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36627** **Region 3**
Pacific Ocean at Jalama Beach (Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Nine of 150 samples exceeded the geometric mean standard for enterococcus (LOEs 19458 and 56280) and 19 of 270 samples exceeded the single sample maximum for enterococcus (LOEs 19459 56279) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 150 samples exceeded the geometric mean standard for enterococcus (LOEs 19458 and 56280) and 19 of 270 samples exceeded the single sample maximum for enterococcus (LOEs 19459 56279) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 36627, Enterococcus **Region 3**
Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID: 19458

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at one AB411 monitoring site (Jalama Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36627, Enterococcus **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	19459
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 13 of 138 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at one AB411 monitoring site (Jalama Beach)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36627, Enterococcus **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID: 56279

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 132
Number of Exceedances: 6

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 132 samples exceed the criterion for Enterococci.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at 1 monitoring site [Jalama Beach]
Temporal Representation: Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36627, Enterococcus **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID: 56280

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	118
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 118 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Jalama Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 36669 Region 3

Pacific Ocean at Jalama Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

It should be noted that some , if not all, of the data associated with this decision are E. coli results that are evaluated using the Ocean Plan Objective for Fecal Coliform. This objective is higher than the USEPA recreation criteria for E. coli. Evaluation of the data using the Fecal Coliform Objective could result in an erroneous decision to remove the beach segment from the 303(d) List and are not used here as the basis of a decision to de-list.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 150 samples exceeded the geometric mean standard for fecal coliform (LOEs 19456 and 56282) and 8 of 270 samples exceeded the single sample maximum for fecal coliform (LOEs 19457 and 56281) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The data associated with LOE 3987 (placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is being fully supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Although zero of 150 samples exceeded the geometric mean standard for fecal coliform (LOEs 19456 and 56282) and 8 of 270 samples exceeded the single sample maximum for fecal coliform (LOEs 19457 and 56281) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy, some of these data are for E. coli and are incorrectly compared to the Fecal Coliform Objective. Therefore the decision must remain Do Not De-List..
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) List because applicable water quality standards for the pollutant are not used in this assessment. Some of the data included here are E. coli data and those data should not be assessed using the Fecal Coliform Objective.

Line of Evidence (LOE) for Decision ID 36669, Fecal Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	19456
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at one AB411 monitoring site (Jalama Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36669, Fecal Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	19457
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 138 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at one AB411 monitoring site (Jalama Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36669, Fecal Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	3987
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

	2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36669, Fecal Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	56281
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	132
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Jalama Beach (Santa Barbara County) and results are as follows: 1 of 132 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at 1 monitoring site [Jalama Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36669, Fecal Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	56282
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	118
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 118 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Jalama Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 43209 Region 3

Pacific Ocean at Jalama Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Twenty seven of 132 samples (LOE 56290) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Nine of 169 samples exceeded the geometric mean standard for total coliform (LOEs 19461, 31440, and 56292), 14 of 353 samples exceeded the single sample maximum for total coliform (LOEs 19460, 31441, and 56291), and 5 of 269 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19481 and 56293) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California,

SWRCB, 2005). The data associated with LOE 3988 (placeholder reference for assessments made prior to the 2006) is no longer available.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty seven of 132 samples (LOE 56290) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	56293
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	132
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 132 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Jalama Beach.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	56290
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	132
Number of Exceedances:	27
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 27 of 132 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at 1 monitoring site [Jalama Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	56291
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	132
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 132 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at 1 monitoring site [Jalama Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	56292
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	118
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 118 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Jalama Beach.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	31440
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Beach monitoring data was collected from April 2004 through October 2006. A total of 83 dry month (April through October) single samples were collected with 19 dry month geomeans calculated. Four of the 19 geomeans exceeded the geomean water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at one monitoring site (Jalama Beach)
Temporal Representation:	Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	31441
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	83
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Beach monitoring data was collected from April 2004 through October 2006. A total of 83 dry month (April through October) single samples were collected with 4 samples exceeding the water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Ab 411-California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at one monitoring site (Jalama Beach)
Temporal Representation:	Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	19461
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at one monitoring site (Jalama Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	19481

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 137 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at one monitoring site (Jalama Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	19460
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Jalama Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 9 of 138 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Jalama Beach (Santa Barbara County) was collected at one monitoring site (Jalama Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43209, Total Coliform **Region 3**

Pacific Ocean at Jalama Beach (Santa Barbara County)

LOE ID:	3988
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)**
Water Body ID: **CAX31510031200210022030 55**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38442** **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

Pollutant: **Total Coliform**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Seventeen of 134 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 148 samples exceeded the geometric mean standard for total coliform (LOEs 19186 and 56127), 3 of 265 samples exceeded the single sample maximum for total coliform (LOEs 19185 and 56126), and 2 of 264 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19187 and 56140) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The data associated with the original listing (LOE 3984 - placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is being fully supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of 134 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 148 samples exceeded the geometric mean standard for total coliform (LOEs 19186 and 56127), 3 of 265 samples exceeded the single sample maximum for total coliform (LOEs 19185 and 56126), and 2 of 264 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19187 and 56140) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 38442, Total Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	19186
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 31 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at one monitoring site (Gaviota State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38442, Total Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	19187
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	130
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 130 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004

	AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at one monitoring site (Gaviota State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38442, Total Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	3984
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38442, Total Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	19185
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	131
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 131 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at one monitoring site (Gaviota State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38442, Total Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	56140
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 134 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that

	total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Gaviota State Beach.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38442, Total Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	56127
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 117 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Gaviota State Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38442, Total Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	56126
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 134 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at 1 monitoring site [Gaviota State Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38442, Total Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	56125
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	134
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 17 of 134 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at 1 monitoring site [Gaviota State Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38966 Region 3

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four of 148 samples exceeded the geometric mean standard for enterococcus (LOEs 19183 and 56122) and 13 of 265 samples exceeded the single sample maximum for enterococcus (LOEs 19184 and 56389) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 148 samples exceeded the geometric mean standard for enterococcus (LOEs 19183 and 56122) and 13 of 265 samples exceeded the single sample maximum for enterococcus (LOEs 19184 and 56389) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38966, Enterococcus Region 3

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	56389
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 134 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at 1 monitoring site [Gaviota State Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38966, Enterococcus **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	56122
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 117 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected at station Gaviota State Beach.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38966, Enterococcus **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID: 19184

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 131
Number of Exceedances: 6

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 131 samples exceed the criterion for Enterococci.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at one AB411 monitoring site (Gaviota State Beach)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38966, Enterococcus **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID: 19183

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at one AB411 monitoring site (Gaviota State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 39070 Region 3

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 148 samples exceeded the geometric mean standard for fecal coliform (LOEs 19615 and 56124) and 6 of 265 samples exceeded the single sample maximum for fecal coliform (LOEs 19616 and 56123) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 148 samples exceeded the geometric mean standard for fecal coliform (LOEs 19615 and

56124) and 6 of 265 samples exceeded the single sample maximum for fecal coliform (LOEs 19616 and 56123) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39070, Fecal Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	19615
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at one AB411 monitoring site (Gaviota State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39070, Fecal Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	19616
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	131
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 131 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at one AB411 monitoring site (Gaviota State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39070, Fecal Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	56124
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	117
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 117 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

	Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Gaviota State Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39070, Fecal Coliform **Region 3**

Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County)

LOE ID:	56123
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) and results are as follows: 2 of 134 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Gaviota Beach (mouth of Canada de la Gaviota Creek, Santa Barbara County) was collected at 1 monitoring site [Gaviota State Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Refugio Beach (Santa Barbara County)**
Water Body ID: **CAX3151002220021002221432**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38164** **Region 3**
Pacific Ocean at Refugio Beach (Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Fourteen of 160 samples exceeded the geometric mean standard for enterococcus (LOEs 20110 and 56464) and 26 of 296 samples exceeded the single sample maximum for enterococcus (LOEs 20111 and 56463) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of 160 samples exceeded the geometric mean standard for enterococcus (LOEs 20110 and 56464) and 26 of 296 samples exceeded the single sample maximum for enterococcus (LOEs 20111 and 56463) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 38164, Enterococcus **Region 3**
Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID: 20110

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at one AB411 monitoring site (Refugio State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38164, Enterococcus **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	20111
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 18 of 156 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

	Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at one AB411 monitoring site (Refugio State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38164, Enterococcus **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	56464
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 128 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Refugio State Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38164, Enterococcus **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	56463
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140

Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 140 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at 1 monitoring site [Refugio State Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 44486 Region 3

Pacific Ocean at Refugio Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This water body segment is identified as an AB411 beach so data collected during the time frame of April 1st to October 31st (dry weather) was also assessed using a four percent exceedance percentage (sections 3.3 and 4.3 of Listing Policy, AB411 binomial tables specific to listing/delisting coastal beaches can be found at www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303d_binomial_tables.xls). There are two lines of evidence for dry weather single sample and geometric mean calculations. Six of 91 samples exceeded the single sample maximum for total coliform (LOE 31442) and 3 of 19 samples exceeded the geometric mean for total coliform (LOE 31443). The sample size for the geometric mean for dry weather total coliform sampling (LOE 31443) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 22 samples is needed to determine if a beneficial use is supported using the AB411 binomial table specific to delisting coastal beaches (www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303d_binomial_tables.xls). Therefore, the

use support rating for this LOE is set to 'insufficient information'.

Seven additional lines of evidence are available in the administrative record to assess this pollutant. Thirty five of 140 samples (LOE 56473) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Seven of 160 samples exceeded the geometric mean standard for total coliform (LOEs 20113 and 56475), 11 of 196 samples exceeded the single sample maximum for total coliform (LOEs 20112 and 56474), and 1 of 154 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20114) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The data associated with LOE 3993 (placeholder reference for assessments made prior to the 2006) is no longer available.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty five of 140 samples (LOE 56473) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44486, Total Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	56473
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	140
Number of Exceedances:	35
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 35 of 140 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County)

	was collected at 1 monitoring site [Refugio State Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44486, Total Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	56475
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 128 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Refugio State Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44486, Total Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	56474
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 140 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at 1 monitoring site [Refugio State Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44486, Total Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	31442
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	91
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2004 through October 2006. A total of 91 dry month (April through October) single samples were collected with 6 samples exceeding the water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at one monitoring site (Refugio State Beach)
Temporal Representation:	Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44486, Total Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	31443
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2004 through October 2006. A total of 91 dry month (April through October) single samples were collected with 19 dry month geomeans calculated. Three of the 19 geomeans exceeded the geomean water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at one monitoring site (Refugio State Beach)
Temporal Representation:	Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44486, Total Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	3993
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

	2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44486, Total Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	20112
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 156 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at one monitoring site (Refugio State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44486, Total Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	20113
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at one monitoring site (Refugio State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44486, Total Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	20114
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	154
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 154 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at one monitoring site (Refugio State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37815 Region 3

Pacific Ocean at Refugio Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 160 samples exceeded the geometric mean standard for fecal coliform (LOEs 20108 and 56466) and 4 of 295 samples exceeded the single sample maximum for fecal coliform (LOEs 20109 and 56465) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 160 samples exceeded the geometric mean standard for fecal coliform (LOEs 20108 and 56466) and 4 of 295 samples exceeded the single sample maximum for fecal coliform (LOEs 20109 and 56465) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37815, Fecal Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	20108
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at one AB411 monitoring site (Refugio State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37815, Fecal Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	20109
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Refugio Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 155 samples exceed the criterion for Coliform, Fecal.

Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at one AB411 monitoring site (Refugio State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37815, Fecal Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	56466
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 128 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Refugio State Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37815, Fecal Coliform **Region 3**

Pacific Ocean at Refugio Beach (Santa Barbara County)

LOE ID:	56465
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Refugio Beach (Santa Barbara County) and results are as follows: 0 of 140 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Refugio Beach (Santa Barbara County) was collected at 1 monitoring site [Refugio State Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)**
Water Body ID: **CAX31510022200201071535 02**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36992** **Region 3**
Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, single line of evidence is necessary to assess listing status.

The sample size for the geometric mean for enterococcus (LOE 19605) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Four of 24 samples exceeded the geometric mean standard for enterococcus and 11 of 105 samples exceeded the single sample maximum for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 24 samples exceeded the geometric mean standard for enterococcus and 11 of 105 samples exceeded the single sample maximum for enterococcus (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36992, Enterococcus **Region 3**
Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

LOE ID: 19605

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 23 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) was collected at one AB411 monitoring site (Arroyo Quemada)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 3/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36992, Enterococcus **Region 3**

Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

LOE ID:	19606
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	105
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 105 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) was collected at one AB411 monitoring site (Arroyo Quemada)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 3/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36912 Region 3

Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean for fecal coliform (LOE 19603) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 23 samples exceeded the geometric mean standard for fecal coliform and 4 of 105 samples exceeded the single sample maximum for fecal coliform (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 23 samples exceeded the geometric mean standard for fecal coliform and 4 of 105 samples exceeded the single sample maximum for fecal coliform (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36912, Fecal Coliform **Region 3**

Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

LOE ID:	19603
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) was collected at one AB411 monitoring site (Arroyo Quemada)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 3/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36912, Fecal Coliform **Region 3**

Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

LOE ID:	19604
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	105
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Quemada

	Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 105 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) was collected at one AB411 monitoring site (Arroyo Quemada)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 3/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36651 Region 3

Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean for total coliform (LOE 19608) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Four of 23 samples exceeded the geometric mean standard for total coliform (LOE 19608), 6 of 105 samples exceeded the single sample maximum for total coliform (LOE 19607), and 1 of 105 exceeded the fecal to the total coliform ratio criteria (LOE 19203) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 23 samples exceeded the geometric mean standard for total coliform (LOE 19608), 6 of 105 samples exceeded the single sample maximum for total coliform (LOE 19607), and 1 of 105 exceeded

the fecal to the total coliform ratio criteria (LOE 19203) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36651, Total Coliform **Region 3**

Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

LOE ID:	19608
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 23 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) was collected at one monitoring site (Arroyo Quemada)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 3/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36651, Total Coliform **Region 3**

Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

LOE ID:	19607
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	105
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 105 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) was collected at one monitoring site (Arroyo Quemada)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 3/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36651, Total Coliform **Region 3**

Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County)

LOE ID:	19203
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	105
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 105 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

	Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Arroyo Quemada Beach (Santa Barbara County) was collected at one monitoring site (Arroyo Quemada)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 3/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at El Capitan Beach (Santa Barbara County)**
Water Body ID: **CAX3151002020021002202043**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36800** **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of 158 samples exceeded the geometric mean standard for enterococcus (LOEs 19610 and 56235) and 9 of 284 samples exceeded the single sample maximum for enterococcus (LOEs 19611 and 56234) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 158 samples exceeded the geometric mean standard for enterococcus (LOEs 19610 and 56235) and 9 of 284 samples exceeded the single sample maximum for enterococcus (LOEs 19611 and 56234) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36800, Enterococcus **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID: 56235

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 126 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station El Capitan State Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36800, Enterococcus **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	56234
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 138 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at 1 monitoring site [El Capitan State Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36800, Enterococcus **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	19610
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at one AB411 monitoring site (El Capitan State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36800, Enterococcus **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	19611
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146

Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 146 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at one AB411 monitoring site (El Capitan State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36801 Region 3

Pacific Ocean at El Capitan Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 158 samples exceeded the geometric mean standard for enterococcus (LOEs 19588 and 56252) and 4 of 283 samples exceeded the single sample maximum for enterococcus (LOEs 19609 and 56251) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 158 samples exceeded the geometric mean standard for enterococcus (LOEs 19588 and 56252) and 4 of 283 samples exceeded the single sample maximum for enterococcus (LOEs 19609 and 56251) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36801, Fecal Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	19609
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	145
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 145 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at one AB411 monitoring site (El Capitan State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36801, Fecal Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	19588
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at one AB411 monitoring site (El Capitan State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36801, Fecal Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	56252
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 126 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at station El Capitan State Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36801, Fecal Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	56251
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at El Capitan Beach (Santa Barbara County) and results are as follows: 2 of 138 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at 1 monitoring site [El Capitan State Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37425 **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Fourteen of 138 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 158 samples exceeded the geometric mean standard for total coliform (LOEs 19613 and 56255), 3 of 284 samples exceeded the single sample maximum for total coliform (LOEs 19612 and 56254), and 2 of 282 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19614 and 56256) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of 138 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 158 samples exceeded the geometric mean standard for total coliform (LOEs 19613 and 56255), 3 of 284 samples exceeded the single sample maximum for total coliform (LOEs 19612 and 56254), and 2 of 282 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19614 and 56256) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37425, Total Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	56256
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	138
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 138 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: The samples were collected at station El Capitan State Beach.
Temporal Representation: The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37425, Total Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID: 56254

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 138
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 138 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at 1 monitoring site [El Capitan State Beach]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37425, Total Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID: 56253

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Shellfish Harvesting
Number of Samples:	138
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 14 of 138 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at 1 monitoring site [El Capitan State Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37425, Total Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	56255
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 126 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station El Capitan State Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	

QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37425, Total Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	19614
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	144
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 144 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at one monitoring site (El Capitan State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37425, Total Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	19613
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County) was collected at one monitoring site (El Capitan State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37425, Total Coliform **Region 3**

Pacific Ocean at El Capitan Beach (Santa Barbara County)

LOE ID:	19612
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at El Capitan Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 146 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at El Capitan Beach (Santa Barbara County)

	was collected at one monitoring site (El Capitan State Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Ocean Beach (Santa Barbara County)**
Water Body ID: **CAX3141005020021002220006**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38424** **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

It should be noted that some , if not all, of the data associated with this decision are E. coli results that are evaluated using the Ocean Plan Objective for Fecal Coliform. This objective is higher than the USEPA recreation criteria for E. coli. Evaluation of the data using the Fecal Coliform Objective could result in an erroneous decision to remove the beach segment from the 303(d) List and are not used here as the basis of a decision to de-list.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 117 samples exceeded the geometric mean standard for fecal coliform (LOEs 20190 and 56167) and 4 of 225 samples exceeded the single sample maximum for fecal coliform (LOEs 20191 and 56166) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The data associated with LOE 3989 (placeholder reference for assessments made prior to the 2006) is no longer available. However, the most recent six years of data show that the beneficial use is being fully supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Although zero of 117 samples exceeded the geometric mean standard for fecal coliform (LOEs 20190 and 56167) and 4 of 225 samples exceeded the single sample maximum for fecal coliform (LOEs 20191 and 56166) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy, some of these data are for E. coli and are incorrectly compared to the Fecal Coliform Objective. Therefore the decision must remain Do Not De-List..
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) List because applicable water

quality standards for the pollutant are not used in this assessment. Some of the data included here are E. coli data and those data should not be assessed using the Fecal Coliform Objective.

Line of Evidence (LOE) for Decision ID 38424, Fecal Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	56167
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	85
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 85 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 816 Ocean/Surf Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38424, Fecal Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	56166
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Ocean Beach (Santa Barbara County) and results are as follows: 1 of 90 samples exceed the criterion for Coliform, Fecal.

Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at 1 monitoring site [Ocean/Surf Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-10/7/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38424, Fecal Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	20191
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	135
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 135 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at one AB411 monitoring site (Ocean/Surf Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38424, Fecal Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	3989
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38424, Fecal Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	20190
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at one AB411 monitoring site (Ocean/Surf Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38949 Region 3

Pacific Ocean at Ocean Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Sixty two of 225 samples (LOEs 25569 and 56180) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Six of 117 samples exceeded the geometric mean standard for total coliform (LOEs 20195 and 56182), 7 of 225 samples exceeded the single sample maximum for total coliform (LOEs 20194 and 56181), and 0 of 134 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20196) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The data associated with LOE 3990 (placeholder reference for assessments made prior to the 2006) is no longer available. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty two of 225 samples (LOEs 25569 and 56180) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38949, Total Coliform Region 3

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	20196
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	134
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 134 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at one monitoring site (Ocean/Surf Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38949, Total Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	20195
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005

	AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at one monitoring site (Ocean/Surf Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38949, Total Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	20194
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	135
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 135 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at one monitoring site (Ocean/Surf Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38949, Total Coliform — Region 3

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	3990
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38949, Total Coliform — Region 3

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	25569
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	135
Number of Exceedances:	51
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data for this line of evidence was collected weekly by County of Santa Barbara Staff at one AB 411 site (Ocean Beach) between January 2004 and December 2006.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that not more than 10 percent of the total coliform samples shall exceed 230 per 100 ml.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence was collected at Pacific Ocean at Ocean Beach (Santa Barbara County) at one AB 411 site (Ocean Beach).
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006.
Environmental Conditions:	
QAPP Information:	No QA information is available.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38949, Total Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	56181
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 90 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at 1 monitoring site [Ocean/Surf Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-10/7/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38949, Total Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	56182

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	85
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 85 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 816 Ocean/Surf Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38949, Total Coliform **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	56180
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	90
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 11 of 90 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County)

	was collected at 1 monitoring site [Ocean/Surf Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-10/7/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38891 Region 3

Pacific Ocean at Ocean Beach (Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Seven of 117 samples exceeded the geometric mean standard for enterococcus (LOEs 20192 and 56165) and 9 of 225 samples exceeded the single sample maximum for enterococcus (LOEs 20193 and 56164) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 117 samples exceeded the geometric mean standard for enterococcus (LOEs 20192 and 56165) and 9 of 225 samples exceeded the single sample maximum for enterococcus (LOEs 20193 and 56164) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38891, Enterococcus Region 3

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	56164
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	3

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 90 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at 1 monitoring site [Ocean/Surf Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-10/7/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38891, Enterococcus **Region 3**

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	56165
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	85
Number of Exceedances:	4
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Four of the 85 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 816 Ocean/Surf Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38891, Enterococcus — Region 3

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	20193
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	135
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 135 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at one AB411 monitoring site (Ocean/Surf Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38891, Enterococcus — Region 3

Pacific Ocean at Ocean Beach (Santa Barbara County)

LOE ID:	20192
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Ocean Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Enterococci.

Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Ocean Beach (Santa Barbara County) was collected at one AB411 monitoring site (Ocean/Surf Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Guadalupe Dunes (Santa Barbara County)**
Water Body ID: **CAX3121003020021002233045**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **36984** **Region 3**
Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Six of 143 samples exceeded the geometric mean standard for enterococcus (LOEs 19218 and 56173) and 11 of 265 samples exceeded the single sample maximum for enterococcus (LOEs 19219 and 56172) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 143 samples exceeded the geometric mean standard for enterococcus (LOEs 19218 and 56173) and 11 of 265 samples exceeded the single sample maximum for enterococcus (LOEs 19219 and 56172) for the water contact recreation water quality standardand this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36984, Enterococcus **Region 3**
Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID: 56172

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 128 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at 1 monitoring site [Guadalupe Dunes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36984, Enterococcus **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	56173
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	111
Number of Exceedances:	5
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Five of the 111 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	The samples were collected at station Guadalupe Dunes Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36984, Enterococcus **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	19219
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 137 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at one AB411 monitoring site (Guadalupe Dunes Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36984, Enterococcus **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	19218
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at one AB411 monitoring site (Guadalupe Dunes Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36804 Region 3

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 143 samples exceeded the geometric mean standard for fecal coliform (LOEs 19216 and 56187) and 2 of 265 samples exceeded the single sample maximum for fecal coliform (LOEs 19217 and 56186) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 143 samples exceeded the geometric mean standard for fecal coliform (LOEs 19216 and 56187) and 2 of 265 samples exceeded the single sample maximum for fecal coliform (LOEs 19217 and 56186) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36804, Fecal Coliform **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	19217
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 137 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at one AB411 monitoring site (Guadalupe Dunes Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36804, Fecal Coliform **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	19216
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at one AB411 monitoring site (Guadalupe Dunes Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36804, Fecal Coliform **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	56186
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Guadalupe Dunes (Santa Barbara County) and results are as follows: 0 of 128 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at 1 monitoring site [Guadalupe Dunes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36804, Fecal Coliform **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	56187
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	111
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 111 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Guadalupe Dunes Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37577 **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Twenty three of 128 samples (LOE 56188) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 143 samples exceeded the geometric mean standard for total coliform (LOEs 19244 and 56190), 8 of 265 samples exceeded the single sample maximum for total coliform (LOEs 19243 and 56189), and 1 of 264 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19245 and 56191) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty three of 128 samples (LOE 56188) exceeded the shellfish harvesting water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37577, Total Coliform **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	19244
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at one monitoring site (Guadalupe Dunes Beach)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37577, Total Coliform **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID: 19243

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 137
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 137 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at one monitoring site (Guadalupe Dunes Beach)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37577, Total Coliform **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID: 19245

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	136
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 136 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at one monitoring site (Guadalupe Dunes Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37577, Total Coliform **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	56191
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 128 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at station Guadalupe Dunes Beach.
Temporal Representation: The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37577, Total Coliform **Region 3**
Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID: 56190

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 111
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 111 geomeans exceeded the total coliform objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at station Guadalupe Dunes Beach.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37577, Total Coliform **Region 3**
Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID: 56189

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 128
Number of Exceedances: 5

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 128 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at 1 monitoring site [Guadalupe Dunes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37577, Total Coliform **Region 3**

Pacific Ocean at Guadalupe Dunes (Santa Barbara County)

LOE ID:	56188
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	128
Number of Exceedances:	23
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) to determine beneficial use support and results are as follows: 23 of 128 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Guadalupe Dunes (Santa Barbara County) was collected at 1 monitoring site [Guadalupe Dunes Beach]

Temporal Representation:	Data was collected over the time period 1/3/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Monterey Bay South (Coastline)**
Water Body ID: **CAX30950042200203111158 00**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **32522** **Region 3**
Monterey Bay South (Coastline)

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. One of seven tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of seven tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32522, Arsenic **Region 3**
Monterey Bay South (Coastline)

LOE ID: 3486

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	All six samples exceeded the Cal-OEHHA screening value (CVRWQCB, 2004M). All six samples were below the USEPA's screening value for tissue. Values screened were for total arsenic. OEHHA recommends that, when total arsenic screening values are used and there are many exceedances, inorganic analyses (via outside lab if necessary) should be requested to further evaluate the extent of the problem (Brodberg, pers. comm. 2002). USEPA has determined if study results provide only wet weight measurements of total As, then convert (via calculation) total arsenic results into inorganic estimates by assuming that inorganic As is between 4 or 10% of total As concentration. Using these assumptions, the arsenic samples do not exceed the USEPA criteria.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	USEPA screening value for inorganic arsenic. In fish tissue, the most appropriate screening value is 1.2 ppm wet weight for inorganic Arsenic. This is supported by EPA scientists and policy makers. (see excerpt from EPA Guidance for Fish Advisories, 2000 and Newport Bay Toxics TMDLs, 2002).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Pacific Grove SMW station at sampling stations 414.0.
Temporal Representation:	Monitored annually since 1977. Most recent ten years of available SMW data for the Pacific Grove sampling location available, from 1988 to 1997.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32522, Arsenic **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3485
Pollutant:	Arsenic
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay - South (shoreline) for Metals. The existing 1994 listing is based on State Mussel Watch (SMW) metals data from within Monterey Harbor (SWAMP, 2004). No metals impairment exists outside of Monterey Harbor and Monterey Harbor is on the 303(d) List as a separate metals impairment listing (and will remain on the list). Regional Board files indicate State Mussel Watch Program data from 1982 through 1993 was used as the basis for listing Monterey Bay - South for metals impairment. The available data from 1982 through 1993 were compared to Elevated Data Levels (EDLs) and Median

	International Standards (MIS). EDLs are no longer considered valid guidelines for determining attainment of water quality standards. The MIS values that were used as indicator values were derived from freshwater fish and therefore were not appropriate comparison values for mussel tissue data. MIS values also are not regulatory values or criteria in the United States. Subsequent to the 1994 listing, additional State Mussel Watch data from 1994 through 1997 has become available. All of the available data were compiled for this evaluation of Monterey Bay - South with respect to metals impairment.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1977 through 1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32522, Arsenic **Region 3**

Monterey Bay South (Coastline)

LOE ID:	77372
Pollutant:	Arsenic
LOE Subgroup:	Subgroup Missing
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 33040 Region 3

Monterey Bay South (Coastline)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of twenty-nine tissue samples exceeded the evaluation guideline. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of twenty-nine tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33040, Cadmium Region 3

Monterey Bay South (Coastline)

LOE ID:	77374
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33040, Cadmium **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3487
Pollutant:	Cadmium

LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay - South (shoreline) for Metals. The existing 1994 listing is based on State Mussel Watch (SMW) metals data from within Monterey Harbor (SMWP, 2004). No metals impairment exists outside of Monterey Harbor and Monterey Harbor is on the 303(d) List as a separate metals impairment listing (and will remain on the list). Regional Board files indicate State Mussel Watch Program data from 1982 through 1993 was used as the basis for listing Monterey Bay South for metals impairment. The available data from 1982 through 1993 were compared to Elevated Data Levels (EDLs) and Median International Standards (MIS). EDLs are no longer considered valid guidelines for determining attainment of water quality standards. The MIS values that were used as indicator values were derived from freshwater fish and therefore were not appropriate comparison values for mussel tissue data. MIS values also are not regulatory values or criteria in the United States. Subsequent to the 1994 listing, additional State Mussel Watch data from 1994 through 1997 has become available. All of the available data were compiled for this evaluation of Monterey Bay South with respect to metals impairment.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1977 through 1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33040, Cadmium **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3488
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	All 28 samples did not exceed the OEHHA screening value (SMWP, 2004). All six samples were well below the USEPA's screening value for tissue.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	OEHHA Screening Guideline = 3.0 mg/kg (Brodberg and Pollock, 1999).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were monitored at the Pacific Grove CA State Mussell Watch station.
Temporal Representation:	Samples were monitored annually from 1977 to 2003. All the data was used for all the years. Each year had one sampling data point, except for years 1977 and 1978, which had two sampling points.
Environmental Conditions:	
QAPP Information:	All data collected by CA State Mussel Watch program following their QA.
QAPP Information Reference(s):	

DECISION ID 33290 Region 3

Monterey Bay South (Coastline)

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence is available in the administrative record to assess this pollutant. Zero out of eleven tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of eleven tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33290, Chlordane Region 3

Monterey Bay South (Coastline)

LOE ID:	3493
Pollutant:	Chlordane
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay - South (shoreline) for Pesticides. The existing 1994 listing is based on State Mussel Watch (SMW) pesticides data that was compared to Elevated Data Levels (EDLs - which are now considered inappropriate comparison values), (SWAMP, 2004). The pesticide data from 1988 to present does not exceed current applicable guidance values and, in fact, the only station sampled since 1988 is the station that is used by the SMW program as a reference site for the central coast (presumed to be relatively unimpaired). No pesticide impairment exists outside of Moss Landing Harbor and Moss Landing Harbor will remain on the List as a separate pesticide impairment.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1982 through 1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33290, Chlordane **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3494
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A total of ten samples were collected; none exceed the OEHHA screening value (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	

Evaluation Guideline:	OEHHA screening values for fish consumption.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	All samples were collected from the Pacific Grove sampling station.
Temporal Representation:	Data include the most recent ten years of SMW data; years 1988-1997.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33290, Chlordane **Region 3**

Monterey Bay South (Coastline)

LOE ID:	77375
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	47523	Region 3
Monterey Bay South (Coastline)		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47523, Chlorpyrifos	**Region 3**
Monterey Bay South (Coastline)	

LOE ID:	77420
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 33354 Region 3

Monterey Bay South (Coastline)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence is available in the administrative record to assess this pollutant. Zero out of eleven tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of eleven tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33354, DDT (Dichlorodiphenyltrichloroethane) Region 3

Monterey Bay South (Coastline)

LOE ID:	3495
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay - South (shoreline) for Pesticides. The existing 1994 listing is based on State Mussel Watch (SMW) pesticides data that was compared to Elevated Data Levels (EDLs - which are now considered inappropriate comparison values), (SWAMP, 2004). The pesticide data from 1988 to present does not exceed current applicable guidance values and, in fact, the only station sampled since 1988 is the station that is used by the SMW program as a reference site for the central coast (presumed to be relatively unimpaired). No pesticide impairment exists outside of Moss Landing Harbor and Moss Landing Harbor will remain on the List as a separate pesticide impairment.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1982 through 1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33354, DDT (Dichlorodiphenyltrichloroethane) Region 3

Monterey Bay South (Coastline)

LOE ID:	3496
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A total of ten samples were collected; none exceeded the OEHHA screening value (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	OEHHA screening values for fish consumption.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	All samples were collected from the Pacific Grove sampling station.
Temporal Representation:	Data include the most recent ten years of SMW data; years 1988-1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33354, DDT (Dichlorodiphenyltrichloroethane) Region 3

Monterey Bay South (Coastline)

LOE ID:	77426
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**33441**	**Region 3**
Monterey Bay South (Coastline)		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence is available in the administrative record to assess this pollutant. One out of eleven tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One out of eleven tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33441, Dieldrin **Region 3**

Monterey Bay South (Coastline)

LOE ID:	77427
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program

	Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33441, Dieldrin **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3498
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A total of ten samples were collected; none exceeded the OEHHA screening value (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	OEHHA screening values for fish consumption.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	All samples were collected from the Pacific Grove sampling station.
Temporal Representation:	Data include the most recent ten years of SMW data; years 1988-1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33441, Dieldrin **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3497
Pollutant:	Dieldrin
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay - South (shoreline) for Pesticides. The existing 1994 listing is based on State Mussel Watch (SMW) pesticides data that was compared to Elevated Data Levels (EDLs - which are now considered inappropriate comparison values), (SWAMP, 2004). The pesticide data from 1988 to present does not exceed current applicable guidance values and, in fact, the only station sampled since 1988 is the station that is used by the SMW program as a reference site for the central coast (presumed to be relatively unimpaired). No pesticide impairment exists outside of Moss Landing Harbor and

	Moss Landing Harbor will remain on the List as a separate pesticide impairment.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1982 through 1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

DECISION ID 33426 Region 3

Monterey Bay South (Coastline)

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence is available in the administrative record to assess this pollutant. Zero out of eleven tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of eleven tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33426, Endosulfan Region 3

Monterey Bay South (Coastline)

LOE ID:	3499
Pollutant:	Endosulfan
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay South (shoreline) for Pesticides. The existing 1994 listing is based on State Mussel Watch (SMW) pesticides data that was compared to Elevated Data Levels (EDLs which are now considered inappropriate comparison values), (SMWP, 2004). The pesticide data from 1988 to present does not exceed current applicable guidance values and, in fact, the only station sampled since 1988 is the station that is used by the SMW program as a reference site for the central coast (presumed to be relatively unimpaired). No pesticide impairment exists outside of Moss Landing Harbor and Moss Landing Harbor will remain on the List as a separate pesticide impairment.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1982 through 1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33426, Endosulfan **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3500
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A total of ten samples were collected; none exceeded the OEHHA screening value and six were non-detects (SMWP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	

Evaluation Guideline:	OEHHA screening values for fish consumption.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	All samples were collected from the Pacific Grove sampling station.
Temporal Representation:	Data include the most recent ten years of SMW data; years 1988-1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33426, Endosulfan **Region 3**

Monterey Bay South (Coastline)

LOE ID:	77428
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends

(NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	49335	Region 3
Monterey Bay South (Coastline)		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49335, Endrin	**Region 3**
Monterey Bay South (Coastline)	

LOE ID:	77430
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 33433 Region 3

Monterey Bay South (Coastline)

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Several LOEs have been disassociated with this decision (3473, 3474, 3475 = Del Monte Beach; 3477, 3478, 3479, 3480 = San Carlos Beach; 3481, 3482, 3483, 3484 = Lovers Point) and should be associated with their appropriate water body (specific beach) segments.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 15 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.). The sample size for the evaluation guideline Enterococcus is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 15 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33433, Enterococcus **Region 3**

Monterey Bay South (Coastline)

LOE ID:	55305
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Monterey Bay South (Coastline) was collected at 1

	monitoring site [Municipal Waste Water Facility]
Temporal Representation:	Data was collected over the time period 3/25/2008-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33433, Enterococcus **Region 3**

Monterey Bay South (Coastline)

LOE ID:	14131
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Monterey Bay to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in marine waters is 104 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Monterey Bay was collected at 2 monitoring sites [NMB_CCLEAN - North Monterey Bay, SMB_CCLEAN - South Monterey Bay]
Temporal Representation:	Data was collected over the time period 2/20/2004-3/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID 42174 **Region 3**

Monterey Bay South (Coastline)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 136samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 13 samples exceed the water quality objective for non-contact recreation. The sample size for the evaluation guideline for recreation for Fecal Coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 16 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 13 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42174, Fecal Coliform **Region 3**

Monterey Bay South (Coastline)

LOE ID:	13991
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Monterey Bay to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Monterey Bay was collected at 2 monitoring sites [NMB_CCLEAN - North Monterey Bay, SMB_CCLEAN - South Monterey Bay]
Temporal Representation:	Data was collected over the time period 2/20/2004-3/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42174, Fecal Coliform **Region 3**

Monterey Bay South (Coastline)

LOE ID:	13990
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Monterey Bay to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Monterey Bay was collected at 2 monitoring sites [NMB_CCLEAN - North Monterey Bay, SMB_CCLEAN - South Monterey Bay]
Temporal Representation:	Data was collected over the time period 2/20/2004-3/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42174, Fecal Coliform **Region 3**

Monterey Bay South (Coastline)

LOE ID:	55306
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Monterey Bay South (Coastline) and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Monterey Bay South (Coastline) was collected at 1 monitoring site [Municipal Waste Water Facility]
Temporal Representation:	Data was collected over the time period 3/25/2008-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 49336 Region 3

Monterey Bay South (Coastline)

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49336, Heptachlor epoxide **Region 3**

Monterey Bay South (Coastline)

LOE ID:	77434
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is

a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	**49337**	**Region 3**
Monterey Bay South (Coastline)		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49337, Hexachlorobenzene/ HCB	**Region 3**
Monterey Bay South (Coastline)	

LOE ID:	77437
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	33358	Region 3
Monterey Bay South (Coastline)		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence is available in the administrative record to assess this pollutant. Zero out of

eleven tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of eleven tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33358, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Monterey Bay South (Coastline)

LOE ID:	77432
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999;

	Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33358, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3502
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A total of ten samples were collected; none exceeded the OEHHA screening value and eight were non-detects (SMWP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	OEHHA screening values for fish consumption.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	All samples were collected from the Pacific Grove sampling station.
Temporal Representation:	Data include the most recent ten years of SMW data; years 1988-1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33358, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3501
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay - South (shoreline) for Pesticides. The existing 1994 listing is based on State Mussel Watch (SMW) pesticides data that was compared to Elevated Data Levels (EDLs - which are now considered inappropriate comparison values), (SMWP, 2004). The pesticide data from 1988 to present does not exceed current applicable guidance values and, in fact, the only station sampled since 1988 is the station that is used by the SMW program as a reference site for the central coast (presumed to be relatively unimpaired). No pesticide impairment exists outside of Moss Landing Harbor and Moss Landing Harbor will remain on the List as a separate pesticide impairment.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1982 through 1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

DECISION ID 49338 Region 3

Monterey Bay South (Coastline)

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49338, Mercury **Region 3**

Monterey Bay South (Coastline)

LOE ID:	77438
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on

	2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49341 Region 3

Monterey Bay South (Coastline)

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of zero tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49341, Mirex Region 3

Monterey Bay South (Coastline)

LOE ID:	77440
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49342 Region 3

Monterey Bay South (Coastline)

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49342, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Monterey Bay South (Coastline)

LOE ID:	77444
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene, Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID 49343 Region 3

Monterey Bay South (Coastline)

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49343, PCBs (Polychlorinated biphenyls) **Region 3**

Monterey Bay South (Coastline)

LOE ID:	77446
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"

QAPP Information Reference(s):

DECISION ID	40982	Region 3
Monterey Bay South (Coastline)		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence is available in the administrative record to assess this pollutant. Zero out of seven tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of seven tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40982, Selenium	**Region 3**
Monterey Bay South (Coastline)	

LOE ID:	77447
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Pacific Grove Lovers Point, PGLP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 2/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40982, Selenium **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3492
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the six samples exceeded the Cal-OEHHA or USEPA screening value (CVRWQCB, 2004M).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline: OEHHA and USEPA screening values for fish consumption.
Guideline Reference: Placeholder reference 2006 303(d)

Spatial Representation: Pacific Grove SMW station.
Temporal Representation: Monitored annually since 1977. Most recent ten years of available SMW data for the Pacific Grove sampling location available.

Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40982, Selenium **Region 3**

Monterey Bay South (Coastline)

LOE ID: 3491

Pollutant: Selenium
LOE Subgroup: Testimonial Evidence
Matrix: Not Specified
Fraction: None

Beneficial Use: Wildlife Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: There is a proposal to Delist Monterey Bay South (shoreline) for Metals. The existing 1994 listing is based on State Mussel Watch (SMW) metals data from within Monterey Harbor (SMWP, 2004). No metals impairment exists outside of Monterey Harbor and Monterey Harbor is on the 303(d) List as a separate metals impairment listing (and will remain on the list).

Regional Board files indicate State Mussel Watch Program data from 1982 through 1993 was used as the basis for listing Monterey Bay - South for metals impairment. The available data from 1982 through 1993 were compared to Elevated Data Levels (EDLs) and Median International Standards (MIS). EDLs are no longer considered valid guidelines for determining attainment of water quality standards. The MIS values that were used as indicator values were derived from freshwater fish and therefore were not appropriate comparison values for mussel tissue data. MIS values also are not regulatory values or criteria in the United States. Subsequent to the 1994 listing, additional State Mussel Watch data from 1994 through 1997 has become available. All of the available data were compiled for this evaluation of Monterey Bay - South with respect to metals impairment.
Data Reference: Placeholder reference 2006 303(d)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.
Objective/Criterion Reference: Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation: Submittal on 6/14/2004. State Mussel Watch data from 1977 through 1997.
Environmental Conditions:
QAPP Information: All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):

DECISION ID	33421	Region 3
Monterey Bay South (Coastline)		

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Several LOEs have been disassociated with this decision (3450, 3451, 3452, 3453, 3454 = Monterey Beach Hotel; 3455, 3456, 3457, 3458, 3459 = Del Monte Beach; 3460, 3461, 3462, 3463, 3464 = San Carlos Beach; 3465, 3466, 3467, 3468, 3469 = Lovers Point) and should be associated with their appropriate water body (specific beach) segments. Six lines of evidence are available in the administrative record to assess this pollutant. Four of 31 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.). Of these total sample counts, 4 of 14 samples exceeded the 30-day median concentration standard (70/100 ml) for total coliform (LOEs 3471), and 0 of 17 samples exceeded the single sample maximum criteria (10,000 MPN/100 ml) for total coliform (LOEs 3472 and 55311). Zero of 15 samples (LOEs 14008 and 55310) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). LOE 3470 summarizes posted Rain Advisories for all beaches in the county on 15 occasions from 2000 to 2004. Note: These sample sizes on their own are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information' Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 31 samples exceeded the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.), and 0 of 15 samples exceeded the shellfish harvesting water quality objective. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33421, Total Coliform	Region 3
Monterey Bay South (Coastline)	

LOE ID:	14008
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Monterey Bay to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Monterey Bay was collected at 2 monitoring sites [NMB_CCLEAN - North Monterey Bay, SMB_CCLEAN - South Monterey Bay]
Temporal Representation:	Data was collected over the time period 2/20/2004-3/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33421, Total Coliform **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3470
Pollutant:	Total Coliform
LOE Subgroup:	Health Advisories
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County posted Rain Advisories for all beaches in the county on 15 occasions from 2000 to 2004. Each advisory was posted for several days surrounding rain events in the county (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail

	to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The rain advisories are issued for all beaches in Monterey County, including Seaside State Beach.
Temporal Representation:	Rain advisories for the beaches were issued from February 2000 through November 2004.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33421, Total Coliform **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3471
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collects monthly bacteria samples at Seaside State Beach. Although because samples are monthly there is only 1 sample in each 30-day period, there is no limit as to how many samples must be included in the 30-day median total coliform concentration. A ten percent total coliform concentration could not be calculated either, so this criterion was used as a single (monthly) sample comparison as well. Four of 14 samples exceeded the criteria of 70/100 ml and 2 of 14 samples exceeded the criteria of 230/100 ml (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast RWQCB Basin Plan: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70/100 ml, nor shall more than ten percent of the samples collected during any 30-day period exceed 230/100 ml for a five-tube decimal dilution test or 330/100 ml when a three-tube decimal dilution test is used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Seaside State Beach located west of Seaside City Industrial Wastewater Treatment plant, City of Seaside.
Temporal Representation:	Samples were collected monthly from 2/4/2003 through 6/1/2004.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33421, Total Coliform **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3472
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected monthly samples at Seaside State Beach in 2003 and 2004. None of the 14 single samples were in exceedance of the criterion (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: The single sample maximum criterion for total coliform in marine waters = 10,000 MPN/100 ml.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Seaside State Beach located west of Seaside City Industrial Wastewater Treatment plant, City of Seaside.
Temporal Representation:	Samples were collected monthly from 2/4/2003 through 6/1/2004.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33421, Total Coliform **Region 3**

Monterey Bay South (Coastline)

LOE ID:	55311
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density

	shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Monterey Bay South (Coastline) was collected at 1 monitoring site [Municipal Waste Water Facility]
Temporal Representation:	Data was collected over the time period 3/25/2008-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33421, Total Coliform **Region 3**

Monterey Bay South (Coastline)

LOE ID:	55310
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Monterey Bay South (Coastline) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Monterey Bay South (Coastline) was collected at 1 monitoring site [Municipal Waste Water Facility]
Temporal Representation:	Data was collected over the time period 3/25/2008-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID **33349** **Region 3**

Monterey Bay South (Coastline)

Pollutant: **Chromium**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for listing under sections 2.1 and 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.5, chromium exceedences cannot be determined because there is no applicable water quality standards for this pollutant in tissue. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A guideline for total chromium in tissue is not available that complies with the requirements of section 6.1.3 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33349, Chromium **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3489
Pollutant:	Chromium (total)
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	There is a proposal to Delist Monterey Bay - South (shoreline) for Metals. The existing 1994 listing is based on State Mussel Watch (SMW) metals data from within Monterey Harbor (SWAMP, 2004). No metals impairment exists outside of Monterey Harbor and Monterey Harbor is on the 303(d) List as a separate metals impairment listing (and will remain on the list). Regional Board files indicate State Mussel Watch Program data from 1982 through 1993 was used as the basis for listing Monterey Bay South for metals impairment. The available data from 1982 through 1993 were compared to Elevated Data Levels (EDLs) and Median International Standards (MIS). EDLs are no longer considered valid guidelines for determining attainment of water quality standards. The MIS values that were used as indicator values were derived from freshwater fish and therefore were not appropriate comparison values for mussel tissue data. MIS values also are not regulatory values or

	criteria in the United States. Subsequent to the 1994 listing, additional State Mussel Watch data from 1994 through 1997 has become available. All of the available data were compiled for this evaluation of Monterey Bay South with respect to metals impairment.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Request to delist - Delisting report refers to OEHHA and USEPA tissue guidance values.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Monterey Bay - South coastline: 3309.5004, at Pacific Grove SMW station (SMW #414.0).
Temporal Representation:	Submittal on 6/14/2004. State Mussel Watch data from 1977 through 1997.
Environmental Conditions:	
QAPP Information:	All data collected by State Mussel Watch program follows their QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33349, Chromium **Region 3**

Monterey Bay South (Coastline)

LOE ID:	3490
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the six samples exceeded the Cal-OEHHA screening value (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	Screening values were based on MIS (Median International Standard. MIS values are no longer considered valid guidelines for determining attainment of water quality standards. The MIS values that were used as indicator values were derived from freshwater fish and therefore were not appropriate comparison values for mussel tissue data. MIS values are no longer considered valid; currently an acceptable criteria for chromium in tissue does not exist.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Pacific Grove SMW station.
Temporal Representation:	Monitored annually since 1977. Most recent ten years of available SMW data for the Pacific Grove sampling location available.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)**
Water Body ID: **CAX30510030200210022349 34**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37903** **Region 3**
Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of 92 samples exceeded the geometric mean standard for enterococcus (LOEs 19947 and 56271) and 7 of 207 samples exceeded the single sample maximum for enterococcus (LOEs 19948 and 56270) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 92 samples exceeded the geometric mean standard for enterococcus (LOEs 19947 and 56271) and 7 of 207 samples exceeded the single sample maximum for enterococcus (LOEs 19948 and 56270) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37903, Enterococcus **Region 3**
Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID: 56270

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	98
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 98 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at 1 monitoring site [Pajaro Dunes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/10/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37903, Enterococcus **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	56271
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 66 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pajaro Dunes Beach.

Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37903, Enterococcus **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	19948
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	109
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 5 of 109 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Pajaro Dunes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37903, Enterococcus **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	19947
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Pajaro Dunes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37948 Region 3

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 87 samples exceeded the geometric mean standard for fecal coliform (LOEs 19945 and 56273) and 2 of 184 samples exceeded the single sample maximum for fecal coliform (LOEs 19946 and 56272) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 87 samples exceeded the geometric mean standard for fecal coliform (LOEs 19945 and 56273) and 2 of 184 samples exceeded the single sample maximum for fecal coliform (LOEs 19946 and 56272) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37948, Fecal Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	19946
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	86
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 86 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Pajaro Dunes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37948, Fecal Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	19945
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Pajaro Dunes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37948, Fecal Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	56272
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	98
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) and results are as follows: 2 of 98 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at 1 monitoring site [Pajaro Dunes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/10/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37948, Fecal Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	56273
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 66 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pajaro Dunes Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38120 **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

Six lines of evidence are available in the administrative record to assess this pollutant. Eleven of 98 samples (LOE 56274) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 92 samples exceeded the geometric mean standard for total coliform (LOEs 19960 and 56289), 1 of 207 samples exceeded the single sample maximum for total coliform (LOEs 19959 and 56275), and 0 of 86 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20075) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 98 samples (LOE 56274) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 92 samples exceeded the geometric mean standard for total coliform (LOEs 19960 and 56289), 1 of 207 samples exceeded the single sample maximum for total coliform (LOEs 19959 and 56275), and 0 of 86 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20075) for the water contact recreation water quality standard and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38120, Total Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	56289
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 66 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pajaro Dunes Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2008.
Environmental Conditions:	

QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38120, Total Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	56274
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	98
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 11 of 98 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at 1 monitoring site [Pajaro Dunes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/10/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38120, Total Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	56275
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	98
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 98 samples

	exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at 1 monitoring site [Pajaro Dunes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/10/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38120, Total Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	19960
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at one monitoring site (Pajaro Dunes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38120, Total Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID: 19959

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 109
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 109 samples exceed the criterion for Coliform, Total.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at one monitoring site (Pajaro Dunes Beach)
Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38120, Total Coliform **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID: 20075

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 86
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 86 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at one monitoring site (Pajaro Dunes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37960 Region 3

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 19957 and 19958 respectively) are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19957) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19958) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19957) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19958) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37960, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	19957
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Pajaro Dunes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37960, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County)

LOE ID:	19958

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pajaro Dunes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Pajaro Dunes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth**
Water Body ID: **CAX30413023200210022241 37**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **44940** **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

This water body segment is identified as an AB411 beach so data collected during the time frame of April 1st to October 31st (dry weather) was also assessed using a four percent exceedance percentage (section 3.3 of the Listing Policy, AB411 binomial tables specific to listing coastal beaches can be found at www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303d_binomial_tables.xls). There are two lines of evidence for dry weather single sample and geometric mean calculations. Three of 66 samples exceeded the single sample maximum for enterococcus (LOE 31449 and 1 of 15 samples exceeded the geometric mean for enterococcus (LOE 31448).

The sample size for the geometric mean for dry weather enterococcus sampling (LOE 31448) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 22 samples is needed to determine if a beneficial use is supported using the AB411 binomial table specific to listing coastal beaches (www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303d_binomial_tables.xls). Therefore, the use support rating for this LOE is set to 'insufficient information'.

Four additional lines of evidence are available in the administrative record to assess this pollutant. Twenty one of 186 samples exceeded the geometric mean standard for enterococcus (LOEs 20133 and 56490) and 16 of 291 samples exceeded the single sample maximum for enterococcus (LOEs 20134 and 56489) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Three of 66 dry weather samples exceeded the single sample maximum for enterococcus (LOE 31449 and 1 of 15 dry weather samples exceeded the geometric mean for enterococcus (LOE 31448). Twenty one of 186 samples exceeded the geometric mean standard for enterococcus (LOEs 20133 and 56490) and 16 of 291 samples exceeded the single sample maximum for enterococcus (LOEs 20134 and 56489) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44940, Enterococcus **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	20133
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del Mar (Santa Cruz County) to determine beneficial use support and results are as follows: 3 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one AB411 monitoring site (Aptos Creek Mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44940, Enterococcus **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	20134
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	110
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del Mar (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 110 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one AB411 monitoring site (Aptos Creek Mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44940, Enterococcus **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	31448
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Data was collected from April 2004 through October 2006. A total of 66 dry month (April through October) single samples were collected with 15 dry month geomeans calculated. One of the 14 geomeans exceeded the geomean water quality objective.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411-California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one AB411 monitoring site (Aptos Creek Mouth)
Temporal Representation: Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44940, Enterococcus **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID: 31449

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 66
Number of Exceedances: 3

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Data was collected from April 2004 through October 2006. A total of 66 dry month (April through October) single samples were collected with 3 samples exceeding the water quality objective.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: AB 411-California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one AB411 monitoring site (Aptos Creek Mouth)
Temporal Representation: Data was collected over the time period 2004 - 2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44940, Enterococcus **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID: 56489

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	181
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth to determine beneficial use support and results are as follows: 14 of 181 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth was collected at 1 monitoring site [Aptos Creek Mouth]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44940, Enterococcus **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	56490
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	160
Number of Exceedances:	18
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eighteen of the 160 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Aptos Creek Mouth.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 41869 Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 184 samples exceeded the geometric mean standard for fecal coliform (LOE 20131 and 56501) and 7 of 275 samples exceeded the single sample maximum for fecal coliform (LOEs 20132 and 56497) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 184 samples exceeded the geometric mean standard for fecal coliform (LOE 20131 and 56501) and 7 of 275 samples exceeded the single sample maximum for fecal coliform (LOEs 20132 and 56497) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41869, Fecal Coliform Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	20132
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del Mar (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 93 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one AB411 monitoring site (Aptos Creek Mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41869, Fecal Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	20131
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del Mar (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one AB411 monitoring site (Aptos Creek Mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41869, Fecal Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	56497
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	182
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth and results are as follows: 7 of 182 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth was collected at 1 monitoring site [Aptos Creek Mouth]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41869, Fecal Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	56501
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	160
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 160 geomeans exceeded the objective. E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Aptos Creek Mouth.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 41879 Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Fifty eight of 180 samples (LOE 56498) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Four of 185 samples exceeded the geometric mean standard for total coliform (LOEs 20138 and 56500), 4 of 290 samples exceeded the single sample maximum for total coliform (LOEs 20137 and 56499), and 0 of 93 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20148) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty eight of 180 samples (LOE 56498) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41879, Total Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	20148
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del Mar (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 93 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one monitoring site (Aptos Creek Mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41879, Total Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	20137
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del Mar (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one monitoring site (Aptos Creek Mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41879, Total Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	20138
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del Mar (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one monitoring site (Aptos Creek Mouth)
Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41879, Total Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID: 56498

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Shellfish Harvesting

Number of Samples: 180
Number of Exceedances: 58

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Water Board staff assessed Beach Watch data for Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth to determine beneficial use support and results are as follows: 58 of 180 samples exceed the criterion for Coliform, Total.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth was collected at 1 monitoring site [Aptos Creek Mouth]
Temporal Representation: Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41879, Total Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID: 56499

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	180
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth to determine beneficial use support and results are as follows: 2 of 180 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth was collected at 1 monitoring site [Aptos Creek Mouth]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41879, Total Coliform **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	56500
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	159
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 159 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Aptos Creek Mouth.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.

Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

DECISION ID 42500 Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 20135 and 20136 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20135) and 0 of 5 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20136) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20135) and 0 of 5 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20136) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42500, Escherichia coli (E. coli) Region 3

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID: 20136

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del Mar (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one AB411 monitoring site (Aptos Creek Mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42500, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth

LOE ID:	20135
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Rio Del Mar (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Rio Del Mar (Santa Cruz County) was collected at one AB411 monitoring site (Aptos Creek Mouth)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at New Brighton Beach (Santa Cruz County)**
Water Body ID: **CAX30413014200210022152 12**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37242** **Region 3**
Pacific Ocean at New Brighton Beach (Santa Cruz County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Ten of 163 samples exceeded the geometric mean standard for enterococcus (LOEs 20174 and 56375) and 14 of 265 samples exceeded the single sample maximum for enterococcus (LOEs 20175 and 56374) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 163 samples exceeded the geometric mean standard for enterococcus (LOEs 20174 and 56375) and 14 of 265 samples exceeded the single sample maximum for enterococcus (LOEs 20175 and 56374) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37242, Enterococcus **Region 3**
Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID: 20175

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 5 of 110 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at one AB411 monitoring site (New Brighton Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37242, Enterococcus **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	20174
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at one AB411 monitoring site (New Brighton Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37242, Enterococcus **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	56375
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	8
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eight of the 137 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station New Brighton Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37242, Enterococcus **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	56374
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	9

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 9 of 155 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at 1 monitoring site [New Brighton Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37319 Region 3

Pacific Ocean at New Brighton Beach (Santa Cruz County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 158 samples exceeded the geometric mean standard for fecal coliform (LOEs 20164 and 56377) and 7 of 242 samples exceeded the single sample maximum for fecal coliform (LOEs 20173 and 56376) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 158 samples exceeded the geometric mean standard for fecal coliform (LOEs 20164 and 56377) and 7 of 242 samples exceeded the single sample maximum for fecal coliform (LOEs 20173 and 56376) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37319, Fecal Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	20173
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 87 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at one AB411 monitoring site (New Brighton Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37319, Fecal Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	20164
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at one AB411 monitoring site (New Brighton Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37319, Fecal Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	56376
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at New Brighton Beach (Santa Cruz County) and results are as follows: 5 of 155 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at 1 monitoring site [New Brighton Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37319, Fecal Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	56377
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 137 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station New Brighton Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37510 **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Twenty nine of 155 samples (LOE 56378) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 163 samples exceeded the geometric mean standard for total coliform (LOEs 20179 and 56135), 4 of 265 samples exceeded the single sample maximum for total coliform (LOEs 20178 and 56134), and 0 of 87 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20180) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty nine of 155 samples (LOE 56378) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37510, Total Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	20179
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at one monitoring site (New Brighton Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37510, Total Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	20178
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at one monitoring site (New Brighton Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37510, Total Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	20180
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 87 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at one monitoring site (New Brighton Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37510, Total Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	56135
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 137 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station New Brighton Beach.

Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37510, Total Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	56134
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 155 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at 1 monitoring site [New Brighton Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37510, Total Coliform **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	56378
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	155
Number of Exceedances:	29

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 29 of 155 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at 1 monitoring site [New Brighton Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 37939 Region 3

Pacific Ocean at New Brighton Beach (Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 20176 and 20177 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. One of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20176) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20177) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20176)

and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20177) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37939, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	20177
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at one AB411 monitoring site (New Brighton Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37939, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at New Brighton Beach (Santa Cruz County)

LOE ID:	20176
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at New Brighton Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at New Brighton Beach (Santa Cruz County) was collected at one AB411 monitoring site (New Brighton Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Capitola Beach (Santa Cruz County)**
Water Body ID: **CAC30413014200706141042 40**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **41513** **Region 3**
Pacific Ocean at Capitola Beach (Santa Cruz County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Natural Sources | Other Urban Runoff | Recreational and Tourism Activities (non-boating) | Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. One hundred fifty one of 794 samples exceeded the geometric mean standard for enterococcus (LOEs 3446, 19301, 19305, 19273, and 56062) and 149 of 1177 samples exceeded the single sample maximum for enterococcus (LOEs 3446, 19302, 19306, 19274, and 56061) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The counts above include data summarized in LOE 3446 which describes two separate measurements for enterococcus (86 of 415 samples exceeded the geometric mean standard for enterococcus and 78 of 556 samples exceeded the single sample maximum for enterococcus) for the water contact recreation water quality standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred fifty one of 794 samples exceeded the geometric mean standard for enterococcus and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41513, Enterococcus **Region 3**
Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID: 56062

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	329
Number of Exceedances:	55
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifty-five of the 329 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Capitola Beach west of Jetty and Capitola Beach east of Jetty.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to June 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam in Monterey County.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41513, Enterococcus **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	56061
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	362
Number of Exceedances:	47
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 47 of 362 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at 2 monitoring sites [Capitola Beach west of Jetty, Capitola Beach east of Jetty]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41513, Enterococcus **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19274
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	123
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 6 of 123 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Capitola Beach east of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41513, Enterococcus **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19273
Pollutant:	Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Capitola Beach east of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41513, Enterococcus **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	3446
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	415
Number of Exceedances:	86
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Available data indicate sufficient exceedances of bacterial indicator objectives. There were 78 out of 556 samples that single sample maximum for enterococci, 86 out of 415 exceedances of the geomean for enterococci, and 55 out of 422 exceedances of the geomean for fecal coliform. Also, the fecal coliform single sample maximum objectives had high exceedences (51 out of 558) (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in

	water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or (D) 104 enterococcus bacteria per 100 milliliters. Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters; or (B) 200 fecal coliform bacteria per 100 milliliters; or (C) 35 enterococcus bacteria per 100 milliliters. (DHS, 1999)
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Three Stations: SCC170 (east of Capitola Pier), SCC190 (east of the jetty), and SCC180 (west of the Jetty).
Temporal Representation:	04/03/2000-10/31/2005
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, Santa Cruz County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41513, Enterococcus **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19301
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 6 of 24 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Capitola Beach west of Jetty)

Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41513, Enterococcus **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19305
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Soquel Creek mouth)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 4/19/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41513, Enterococcus **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19306
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Soquel Creek mouth)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 4/19/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41513, Enterococcus **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19302
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	130
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 17 of 130 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Capitola Beach west of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 41530 Region 3

Pacific Ocean at Capitola Beach (Santa Cruz County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

It should be noted that the data collected between 2007 and 2010 are E. coli results that are evaluated using the Ocean Plan Objective for Fecal Coliform. This objective is higher than the USEPA recreation criteria for E. coli. Evaluation of the data using the Fecal Coliform Objective could result in an erroneous decision to remove the beach segment from the 303(d) List and are not used here as the basis of a decision to de-list.

Nine lines of evidence are available in the administrative record to assess this pollutant. Ninety nine of 1017 samples exceeded the geometric mean standard for fecal coliform (LOEs 3446, 19271, 19299, 56064 and 56065) and 92 of 1175 samples exceeded the single sample maximum for fecal coliform (LOEs 3446, 19272, 19300, 19304, and 56063) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The counts above include data summarized in LOE 3446 which describes two separate measurements for fecal coliform (55 of 422 samples exceeded the geometric mean standard for fecal coliform and 51 of 558 samples exceeded the single sample maximum for fecal coliform) for the water contact recreation water quality standard. Note that the 86 of 415 sample exceedances listed for LOE 3446 refers to the geometric mean standard for enterococcus and was not included in the calculated totals for fecal coliform (however, this number was included in the sample totals for the enterococcus, Decision ID 41513).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Although 99 of 1017 samples exceeded the geometric mean standard for fecal coliform (LOEs 3446, 19271, 19299, 56064 and 56065) and 92 of 1175 samples exceeded the single sample maximum for fecal coliform and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy, some of these data are for E. coli and are incorrectly compared to the Fecal Coliform Objective. Therefore the decision must remain Do Not De-List.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) List because applicable water

quality standards for the pollutant are not used in this assessment. Some of the data included here are E. coli data and those data should not be assessed using the Fecal Coliform Objective.

Line of Evidence (LOE) for Decision ID 41530, Fecal Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19271
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Capitola Beach east of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41530, Fecal Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19304
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Soquel Creek mouth)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 4/19/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41530, Fecal Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19300
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	116
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 14 of 116 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was

	collected at one AB411 monitoring site (Capitola Beach west of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41530, Fecal Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19272
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 4 of 108 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Capitola Beach east of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41530, Fecal Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19299
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	21
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 5 of 21 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Capitola Beach west of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41530, Fecal Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	3446
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	415
Number of Exceedances:	86
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Available data indicate sufficient exceedances of bacterial indicator objectives. There were 78 out of 556 samples that single sample maximum for enterococci, 86 out of 415 exceedances of the geomean for enterococci, and 55 out of 422 exceedances of the geomean for fecal coliform. Also, the fecal coliform single sample maximum objectives had high exceedences (51 out of 558) (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or (C) 400 fecal coliform bacteria per 100 milliliters; or

	(D) 104 enterococcus bacteria per 100 milliliters. Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters; or (B) 200 fecal coliform bacteria per 100 milliliters; or (C) 35 enterococcus bacteria per 100 milliliters. (DHS, 1999)
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Three Stations: SCC170 (east of Capitola Pier), SCC190 (east of the jetty), and SCC180 (west of the Jetty).
Temporal Representation:	04/03/2000-10/31/2005
Environmental Conditions:	
QAPP Information:	Data record: 2000-2005, Santa Cruz County Health Dept.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41530, Fecal Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	56063
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	362
Number of Exceedances:	22
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Capitola Beach (Santa Cruz County) and results are as follows: 22 of 362 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at 2 monitoring sites [Capitola Beach west of Jetty, Capitola Beach east of Jetty]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41530, Fecal Coliform — Region 3

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	56065
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	223
Number of Exceedances:	29
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 29 of the 223 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The geometric mean for E. coli shall not exceed 126 MPN/100 mL. USEPA Ambient Water Quality Criteria for Bacteria -1986
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	The samples were collected at Capitola Beach west of Jetty and Capitola Beach east of Jetty.
Temporal Representation:	The samples were collected approximately once a week from January 2008 to June 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam in Monterey County.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41530, Fecal Coliform — Region 3

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	56064
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	328
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 9 of the 328 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed 200/100 mL. California Ocean Plan (SWRCB 2006)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Capitola Beach west of Jetty and Capitola Beach east of Jetty.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to June 2008
Environmental Conditions:	
QAPP Information:	These samples were collected for the Beach Watch progam in Monterey County.
QAPP Information Reference(s):	

DECISION ID 44646 Region 3

Pacific Ocean at Capitola Beach (Santa Cruz County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Thirteen lines of evidence are available in the administrative record to assess this pollutant. One hundred seventy three of 360 samples (LOE 56066) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Nineteen of 384 samples exceeded the geometric mean standard for total coliform (LOEs19332, 19335, 19359, and 56068), 12 of 623 samples exceeded the single sample maximum for total coliform (LOEs 19331, 19334, 19358, and 56067), and 29 of 583 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19333, 19336, 19360, and 56069) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred seventy three of 360 samples (LOE 56066) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44646, Total Coliform — Region 3

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19332
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one monitoring site (Capitola Beach east of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform — Region 3

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19359
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Total.

Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one monitoring site (Soquel Creek mouth)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 4/19/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19358
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one monitoring site (Soquel Creek mouth)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 4/19/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	

QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19336
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	115
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 7 of 115 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one monitoring site (Capitola Beach west of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19335
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one monitoring site (Capitola Beach west of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19334
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 4 of 133 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was

	collected at one monitoring site (Capitola Beach west of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19331
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	124
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 124 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one monitoring site (Capitola Beach east of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19360
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one monitoring site (Soquel Creek mouth)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 4/19/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19333
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	107
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 107 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one monitoring site (Capitola Beach east of Jetty)
Temporal Representation:	Data was collected over the time period 1/4/2005 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	56068
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	334
Number of Exceedances:	15
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Fifteen of the 334 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Spatial Representation:	The samples were collected at Capitola Beach west of Jetty and Capitola Beach east of Jetty.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to June 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam in Monterey County.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	56066
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting

Number of Samples:	360
Number of Exceedances:	173
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 173 of 360 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at 2 monitoring sites [Capitola Beach west of Jetty, Capitola Beach east of Jetty]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	56067
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	360
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 6 of 360 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at 2 monitoring sites [Capitola Beach west of Jetty, Capitola Beach east of Jetty]

Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44646, Total Coliform **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	56069
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	360
Number of Exceedances:	21
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-one of the 360 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Capitola Beach west of Jetty and Capitola Beach east of Jetty.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to June 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam in Monterey County.
QAPP Information Reference(s):	

DECISION ID 41524 **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. When compared to the Ocean Plan Objectives for Water Contact Recreation, 1 of 6 samples exceeded the single sample maximum Objective, 2 of 2 geomean assessments exceeded the geomean Objective (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. When compared to the Ocean Plan Objectives for Water Contact Recreation, 1 of 6 samples exceeded the single sample maximum Objective, 2 of 2 geomean assessments exceeded the geomean Objective. Neither of these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41524, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19329
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was

	collected at one AB411 monitoring site (Soquel Creek mouth)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 4/19/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41524, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Capitola Beach (Santa Cruz County)

LOE ID:	19330
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Capitola Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Capitola Beach (Santa Cruz County) was collected at one AB411 monitoring site (Soquel Creek mouth)
Temporal Representation:	Data was collected over the time period 3/15/2004 - 4/19/2004. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Twin Lakes Beach (Santa Cruz County)**
Water Body ID: **CAX30412053200210022311 23**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **38387** **Region 3**
Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Nine of 166 samples exceeded the geometric mean standard for enterococcus (LOEs 20091 and 56504) and 11 of 264 samples exceeded the single sample maximum for enterococcus (LOEs 20092 and 56503) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 166 samples exceeded the geometric mean standard for enterococcus (LOEs 20091 and 56504) and 11 of 264 samples exceeded the single sample maximum for enterococcus (LOEs 20092 and 56503) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38387, Enterococcus **Region 3**
Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID: 20092

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	109
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 109 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Twin Lakes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38387, Enterococcus **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	20091
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Twin Lakes Beach)
Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38387, Enterococcus **Region 3**
Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID: 56504

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 140
Number of Exceedances: 9

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Nine of the 140 geomeans exceeded the entercoccus objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference: California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from Twin Lakes Beach .
Temporal Representation: Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38387, Enterococcus **Region 3**
Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID: 56503

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 155
Number of Exceedances: 9

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 9 of 155 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at 1 monitoring site [Twin Lakes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 41697 Region 3

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 160 samples exceeded the geometric mean standard for fecal coliform (LOEs 20073 and 56506) and 3 of 240 samples exceeded the single sample maximum for fecal coliform (LOEs 20074 and 56505) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 160 samples exceeded the geometric mean standard for fecal coliform (LOEs 20073 and 56506) and 3 of 240 samples exceeded the single sample maximum for fecal coliform (LOEs 20074 and 56505) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41697, Fecal Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	20073
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Twin Lakes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41697, Fecal Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	20074
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	86

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 86 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Twin Lakes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41697, Fecal Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	56505
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	154
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Twin Lakes Beach (Santa Cruz County) and results are as follows: 2 of 154 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at 1 monitoring site [Twin Lakes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41697, Fecal Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	56506
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	139
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 139 geomeans exceeded the objective. Zero of the 139 geomeans exceeded the fecal coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Twin Lakes Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38958 **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Twenty six of 155 samples (LOE 56507) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Two of 166 samples exceeded the geometric mean standard for total coliform (LOEs 20096 and 56512), 1 of 264 samples exceeded the single sample maximum for total coliform (LOEs 20095 and 56508), and 1 of 86 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20097) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty six of 155 samples (LOE 56507) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38958, Total Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	20095
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	109
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 109 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at one monitoring site (Twin Lakes Beach)

Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38958, Total Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID: 20097

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 86

Number of Exceedances: 1

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 86 samples exceed the criterion for Coliform, Total.

Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at one monitoring site (Twin Lakes Beach)

Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38958, Total Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID: 20096

Pollutant: Total Coliform

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at one monitoring site (Twin Lakes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38958, Total Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	56512
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 140 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Twin Lakes Beach.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38958, Total Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	56508
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 155 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at 1 monitoring site [Twin Lakes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38958, Total Coliform **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	56507
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	155

Number of Exceedances:	26
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 26 of 155 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at 1 monitoring site [Twin Lakes Beach]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 39083 Region 3

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 20093 and 20094 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20093) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20094) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of 2 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20093) and 0 of 7 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20094) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39083, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	20093
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Twin Lakes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39083, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Twin Lakes Beach (Santa Cruz County)

LOE ID:	20094
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Twin Lakes Beach (Santa Cruz County) was collected at one AB411 monitoring site (Twin Lakes Beach)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Cowell Beach (Santa Cruz County)**
Water Body ID: **CAX30412053200210012130 48**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37622** **Region 3**
Pacific Ocean at Cowell Beach (Santa Cruz County)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Twenty three of 400 samples exceeded the geometric mean standard for enterococcus (LOEs 19501, 19507, and 56114) and 23 of 621 samples exceeded the single sample maximum for enterococcus (LOEs 19502, 19527, and 56113) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty three of 400 samples exceeded the geometric mean standard for enterococcus (LOEs 19501, 19507, and 56114) and 23 of 621 samples exceeded the single sample maximum for enterococcus (LOEs 19502, 19527, and 56113) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37622, Enterococcus **Region 3**
Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID: 19502

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 128 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell Beach West of the Wharf)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37622, Enterococcus **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19527
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	111
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 111 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell's Beach @ the Stairs)

Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37622, Enterococcus **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID: 19507

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 26
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Enterococci.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell's Beach @ the Stairs)

Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37622, Enterococcus **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID: 19501

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell Beach West of the Wharf)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37622, Enterococcus **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	56113
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	382
Number of Exceedances:	20
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 20 of 382 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

	Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at 2 monitoring sites [Cowell's Beach @ the Stairs, Cowell Beach West of the Wharf]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37622, Enterococcus **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	56114
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	348
Number of Exceedances:	23
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-three of the 348 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at stations Cowell's Beach at the Stairs and Cowell Beach West of the Wharf.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 36659 **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

SIx lines of evidence are available in the administrative record to assess this pollutant. Seventy one of 296 samples exceeded the geometric mean standard for fecal coliform (LOEs 19480, 19505, and 56007) and 54 of 590 samples exceeded the single sample maximum for fecal coliform (LOEs 19500, 19506, and 56445) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

However, achievement of Water Quality Standards is likely by the next listing cycle due to installation of avian exclusion structures on the Santa Cruz Wharf, adjacent to this beach. The creating and avian roosting exclusion zone at the Wharf installation project was completed in August of 2016. Data collected from the beach between September and November 2016 generally show low levels of indicator bacteria.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy one of 296 samples exceeded the geometric mean standard for fecal coliform (LOEs 19480, 19505, and 56007) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36659, Fecal Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19480
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 3 of 22 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell Beach West of the Wharf)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36659, Fecal Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19500
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	111
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 10 of 111 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell Beach West of the Wharf)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36659, Fecal Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19506
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 90 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell's Beach @ the Stairs)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36659, Fecal Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19505
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005

	AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell's Beach @ the Stairs)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36659, Fecal Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	56007
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	253
Number of Exceedances:	68
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 68 of the 253 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at stations Cowell's Beach @ the Stairs and Cowell Beach West of the Wharf.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36659, Fecal Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	56115
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	389
Number of Exceedances:	43
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Cowell Beach (Santa Cruz County) and results are as follows: 43 of 389 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at 2 monitoring sites [Cowell's Beach @ the Stairs, Cowell Beach West of the Wharf]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37062 Region 3

Pacific Ocean at Cowell Beach (Santa Cruz County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. One hundred

seventy three of 384 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Ten of 403 samples exceeded the geometric mean standard for total coliform (LOEs 19531, 19534, and 56011), 2 of 630 samples exceeded the single sample maximum for total coliform (LOEs 19530, 19533, and 56009), and 8 of 391 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19532, 19554, and 56010) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

However, achievement of Water Quality Standards is likely by the next listing cycle due to installation of avian exclusion structures on the Santa Cruz Wharf, adjacent to this beach. The creating and avian roosting exclusion zone at the Wharf installation project was completed in August of 2016. Data collected from the beach between September and November 2016 generally show low levels of indicator bacteria.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred seventy three of 384 samples exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	56011
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	351
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Ten of the 351 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at stations Cowell Beach West of the Wharf and Cowell's

	Beach at the Stairs.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	56010
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	191
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 191 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at stations Cowell Beach West of the Wharf and Cowell's Beach at the Stairs.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	56009
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	384
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 384 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at 2 monitoring sites [Cowell's Beach @ the Stairs, Cowell Beach West of the Wharf]
Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	56008
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	384
Number of Exceedances:	173
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 173 of 384 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at 2 monitoring sites [Cowell's Beach @ the Stairs, Cowell Beach West of the Wharf]

Temporal Representation:	Data was collected over the time period 1/3/2007-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19554
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 90 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one monitoring site (Cowell's Beach @ the Stairs)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19530
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 133 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one monitoring site (Cowell Beach West of the Wharf)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19531
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one monitoring site (Cowell Beach West of the Wharf)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19532
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 110 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one monitoring site (Cowell Beach West of the Wharf)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19533
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	113
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 113 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one monitoring site (Cowell's Beach @ the Stairs)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37062, Total Coliform **Region 3**

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19534
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one monitoring site (Cowell's Beach @ the Stairs)

Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

DECISION ID 37623 Region 3

Pacific Ocean at Cowell Beach (Santa Cruz County)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Four lines of evidence are available in the administrative record to assess this pollutant. When compared to the Ocean Plan Objectives for Water Contact Recreation, 0 of 14 samples exceeded the single sample maximum Objective, 1 of 4 geomean assessments exceeded the geomean Objective (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 4 samples exceeded the geometric mean standard for E. coli (LOEs 19503 and 19528) and 0 of 14 samples exceeded the single sample maximum for E. Coli (LOEs 19504 and 19529) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 37623, Escherichia coli (E. coli) — Region 3

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19504
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell Beach West of the Wharf)
Temporal Representation:	Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37623, Escherichia coli (E. coli) — Region 3

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19503
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004

AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference: Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline: Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference: Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation: Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell Beach West of the Wharf)
Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37623, Escherichia coli (E. coli) Region 3

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID: 19529

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference: Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline: Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference: Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation: Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell's Beach @ the Stairs)
Temporal Representation: Data was collected over the time period 3/8/2004 - 12/26/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37623, Escherichia coli (E. coli) Region 3

Pacific Ocean at Cowell Beach (Santa Cruz County)

LOE ID:	19528
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Cowell Beach (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Cowell Beach (Santa Cruz County) was collected at one AB411 monitoring site (Cowell's Beach @ the Stairs)
Temporal Representation:	Two samples were collected at this site on the following dates: 3/8/2004 and 12/26/2006. These data were submitted as part of the AB411 project.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Little Cholame Creek**
Water Body ID: **CAR3170008419990304133622**
Water Body Type: **River & Stream**

DECISION ID **41146** **Region 3**
Little Cholame Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 15 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41146, Nitrate **Region 3**
Little Cholame Creek

LOE ID: 13766

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 15

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Little Cholame Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Cholame Creek was collected at 4 monitoring sites [Parkfield Rd (1st above Parkfield), Parkfield Rd (2nd above Parkfield), Parkfield Rd (~3rd above Parkfield), Lake Driveway]
Temporal Representation:	Data was collected over the time period 3/5/2001-3/9/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41146, Nitrate **Region 3**

Little Cholame Creek

LOE ID:	13767
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Little Cholame Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride

	concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Cholame Creek was collected at 4 monitoring sites [Parkfield Rd (1st above Parkfield), Parkfield Rd (2nd above Parkfield), Parkfield Rd (~3rd above Parkfield), Lake Driveway]
Temporal Representation:	Data was collected over the time period 3/5/2001-3/9/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**41100**	**Region 3**
Little Cholame Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision to specific conductivity. One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the water quality objective for Agricultural Supply. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceed the water quality objective for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41100, Specific Conductivity **Region 3**

Little Cholame Creek

LOE ID:	13865
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Little Cholame Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Cholame Creek was collected at 4 monitoring sites [Parkfield Rd (1st above Parkfield), Parkfield Rd (2nd above Parkfield), Parkfield Rd (~3rd above Parkfield), Lake Driveway]
Temporal Representation:	Data was collected over the time period 3/5/2001-3/9/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Cholame Creek**
Water Body ID: **CAR3170008120011127080727**
Water Body Type: **River & Stream**

DECISION ID **38165** **Region 3**
Cholame Creek

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 22 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-two of the 22 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38165, Chloride **Region 3**
Cholame Creek

LOE ID: 10488

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	20
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 20 of 20 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38165, Chloride **Region 3**

Cholame Creek

LOE ID:	50274
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38277**	**Region 3**
Cholame Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Five of 24 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. However, the impaired reach is limited to the 1 mile of stream centered on Bitterwater Road. This reach of creek is fed year round by springs which surface less than one mile upstream into what is dry creek bed most of the year. In addition, the relatively stagnant deep water pool under the bridge where the station is located likely contributes to an unrepresentative micro habitat that is not representative of the entire creek. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 24 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

	indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38277, Oxygen, Dissolved **Region 3**

Cholame Creek

LOE ID:	50163
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38277, Oxygen, Dissolved **Region 3**

Cholame Creek

LOE ID:	50164
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38277, Oxygen, Dissolved **Region 3**

Cholame Creek

LOE ID:	13909
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38277, Oxygen, Dissolved **Region 3**

Cholame Creek

LOE ID:	13910
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 17 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38277, Oxygen, Dissolved **Region 3**

Cholame Creek

LOE ID:	13929
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cholame Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected on a single day 7/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38277, Oxygen, Dissolved **Region 3**

Cholame Creek

LOE ID:	13912
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Cholame Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected on a single day 7/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37981**	**Region 3**
Cholame Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 19 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of the 19 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

	indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37981, Sodium **Region 3**

Cholame Creek

LOE ID:	10506
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 17 of 17 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 5/13/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37981, Sodium **Region 3**

Cholame Creek

LOE ID:	49972

Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Sodium.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38219**	**Region 3**
Cholame Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an

error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

Two lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the 15 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of the 15 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38219, Specific Conductivity **Region 3**

Cholame Creek

LOE ID:	50275
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38219, Specific Conductivity **Region 3**

Cholame Creek

LOE ID:	12254
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 11 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 7/29/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37785 **Region 3**

Cholame Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
TMDL Name:	Estrella River Basin Boron TMDL
TMDL Project Code:	1084
Date TMDL Approved by USEPA:	02/13/2014
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 19 samples exceed the water quality objective for agriculture uses. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of the 19 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Total Maximum Daily Load (TMDL) for boron in streams of the Estrella River Basin has been approved by the USEPA on February 13, 2014.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 37785, Boron — Region 3

Cholame Creek

LOE ID:	3939
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Agricultural Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37785, Boron **Region 3**

Cholame Creek

LOE ID:	10505
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 17 of 17 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 5/13/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37785, Boron **Region 3**

Cholame Creek

LOE ID:	50259
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38372** **Region 3**

Cholame Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Grazing-Related Sources | Natural Sources
TMDL Name:	Cholame Creek Fecal Coliform
TMDL Project Code:	521

Date TMDL Approved by USEPA:	11/30/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Six of the 13 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 13 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Total Maximum Daily Load for Fecal Indicator Bacteria for the Cholame Creek Watershed has been approved by the USEPA on November 30, 2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. However, waterbody pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 38372, Escherichia coli (E. coli) **Region 3**

Cholame Creek

LOE ID:	50128
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38372, Escherichia coli (E. coli) **Region 3**

Cholame Creek

LOE ID:	12311
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38372, Escherichia coli (E. coli) **Region 3**

Cholame Creek

LOE ID:	12310
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **32385** **Region 3**

Cholame Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Grazing-Related Sources | Natural Sources

TMDL Name:	Cholame Creek Fecal Coliform
TMDL Project Code:	521
Date TMDL Approved by USEPA:	11/30/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. However, LOE #2000 contains some of the same data that is summarized in LOE #12293 and is not described in the decision below to avoid double counting those data. Fourteen of the 22 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Two of the 22 samples also exceed the non-contact recreation evaluation guideline. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. However, In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of the 22 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Total Maximum Daily Load for Fecal Indicator Bacteria for the Cholame Creek Watershed has been approved by the USEPA on November 30, 2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32385, Fecal Coliform **Region 3**

Cholame Creek

LOE ID:	2000
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Eight of 10 samples exceed water quality objectives (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Fecal Coliform WQO applicable to REC1.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One site.
Temporal Representation:	Monthly sampling events.
Environmental Conditions:	Data age = 2-3 years old.
QAPP Information:	CCAMP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32385, Fecal Coliform **Region 3**

Cholame Creek

LOE ID:	12294
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32385, Fecal Coliform **Region 3**

Cholame Creek

LOE ID:	12293
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 14 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32385, Fecal Coliform **Region 3**

Cholame Creek

LOE ID:	50143
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32385, Fecal Coliform **Region 3**

Cholame Creek

LOE ID:	50127
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38064**	**Region 3**
Cholame Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 12024) and total ammonia (Decision 12026). This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 14 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 22 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. The unionized ammonia sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 14 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 22 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the

Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38064, Ammonia **Region 3**

Cholame Creek

LOE ID:	49973
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38064, Ammonia **Region 3**

Cholame Creek

LOE ID:	50145
Pollutant:	Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38064, Ammonia **Region 3**

Cholame Creek

LOE ID:	10474
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38064, Ammonia **Region 3**

Cholame Creek

LOE ID:	10507
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]

Temporal Representation:	Data was collected over the time period 1/25/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38298 **Region 3**

Cholame Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 23 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 23 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38298, Chlorophyll-a **Region 3**

Cholame Creek

LOE ID:	10489
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 1 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38298, Chlorophyll-a **Region 3**

Cholame Creek

LOE ID:	50146
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37859**	**Region 3**
Cholame Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 2 nitrate samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the

2 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat. Insufficient evidence was available to support nitrate as a cause of impairment for Warm Freshwater habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 22 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 2 nitrate samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 2 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat.
Insufficient evidence was available to support nitrate as a cause of impairment for Warm Freshwater habitats. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37859, Nitrate **Region 3**

Cholame Creek

LOE ID:	50147
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region

	IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37859, Nitrate **Region 3**

Cholame Creek

LOE ID:	50276
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37859, Nitrate **Region 3**

Cholame Creek

LOE ID:	50125
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37859, Nitrate **Region 3**

Cholame Creek

LOE ID:	50124
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to

	determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37859, Nitrate **Region 3**

Cholame Creek

LOE ID:	50277
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37859, Nitrate **Region 3**

Cholame Creek

LOE ID:	50162
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37859, Nitrate **Region 3**

Cholame Creek

LOE ID:	10491
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37859, Nitrate **Region 3**

Cholame Creek

LOE ID:	10490
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**53542**	**Region 3**
Cholame Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53542, Nitrogen, Nitrite **Region 3**

Cholame Creek

LOE ID:	49970
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37895	Region 3
Cholame Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 13 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 13 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37895, Turbidity	**Region 3**
Cholame Creek	

LOE ID:	50166
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37895, Turbidity **Region 3**

Cholame Creek

LOE ID:	13930
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38371 Region 3

Cholame Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. One of the 14 samples exceed the water quality objectives for Warm Freshwater Habitat and Agricultural Supply, 2 of the 14 samples exceeded the water quality objectives for Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 14 samples exceed the water quality objectives for Warm Freshwater Habitat and Agricultural Supply, 2 of the 14 samples exceeded the water quality objectives for Drinking Water and Recreation and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38371, pH Region 3

Cholame Creek

LOE ID:	12255
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/25/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38371, pH **Region 3**

Cholame Creek

LOE ID:	12309
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data

	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/25/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38371, pH **Region 3**

Cholame Creek

LOE ID:	12256
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [

	317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/25/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38371, pH **Region 3**

Cholame Creek

LOE ID:	12257
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/25/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38371, pH **Region 3**

Cholame Creek

LOE ID:	12258
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Cholame Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/25/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38371, pH **Region 3**

Cholame Creek

LOE ID:	50126
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the

	criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38371, pH **Region 3**

Cholame Creek

LOE ID:	50144
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38371, pH **Region 3**

Cholame Creek

LOE ID:	50129
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38371, pH **Region 3**

Cholame Creek

LOE ID:	49971
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the

	criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38371, pH **Region 3**

Cholame Creek

LOE ID:	50165
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cholame Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cholame Creek was collected at 1 monitoring site [317CHO-Cholame Creek at Bitterwater Road]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Estrella River**
Water Body ID: **CAR3170007119990225125807**
Water Body Type: **River & Stream**

DECISION ID **39746** **Region 3**
Estrella River

Pollutant: **pH**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Six of the 22 samples exceeded the water quality objective for Agricultural uses, 9 of the 22 samples exceed the water quality objectives for Drinking Water and Recreation but only 3 of the 22 samples also exceed the water quality objective for Warm Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 22 samples exceeded the water quality objective for Agricultural uses and 9 of the 22 samples exceed the water quality objectives for Drinking Water and Recreation and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**
Estrella River

LOE ID: 48279

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	12041
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	12055
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	12056
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	12057
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	18933
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and

	Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	18934
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	48277
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	48278
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 4 of 12 samples exceed the

	criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	12058
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	48280
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	48281
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	18951
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	18932
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39746, pH **Region 3**

Estrella River

LOE ID:	18952
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39156**	**Region 3**
Estrella River		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 19 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 23 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 19 samples exceed the Basin Plan general objective for unionized ammonia and zero of the 23 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39156, Ammonia **Region 3**

Estrella River

LOE ID:	54124
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Estrella River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River - 317ESE]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39156, Ammonia — Region 3

Estrella River

LOE ID:	10540
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39156, Ammonia — Region 3

Estrella River

LOE ID:	48528
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39156, Ammonia **Region 3**

Estrella River

LOE ID:	10508
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39971 Region 3

Estrella River

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39971, Chlorophyll-a Region 3

Estrella River

LOE ID:	48530
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39971, Chlorophyll-a **Region 3**

Estrella River

LOE ID:	10541
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317EST-Estrella River at Airport Road , 317ESE-Estrella River at River Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **44170** **Region 3**

Estrella River

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Zero of the 23 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 3 nitrate samples exceed the water quality objective for Warm Freshwater Habitat beneficial use. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 12 nitrate/nitrite samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. Insufficient evidence was found to support nitrate as a cause of impairment for Cold or Warm Freshwater habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 23 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 3 nitrate samples exceed the water quality objective for Warm Freshwater Habitat beneficial use. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 12 nitrate/nitrite samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	13801
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Estrella River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [Airport Rd, River Rd]
Temporal Representation:	Data was collected over the time period 3/5/2001-3/9/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	10524
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-

	Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	48564
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	48565

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	10525
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	18507
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation: Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID: 48548

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference: Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation: Data was collected over the time period 10/29/2008-12/16/2008.
Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID: 13800

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Estrella River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [Airport Rd, River Rd]
Temporal Representation:	Data was collected over the time period 3/5/2001-3/9/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	48566
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	48547
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	48549
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Line of Evidence (LOE) for Decision ID 44170, Nitrate **Region 3**

Estrella River

LOE ID:	18506
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **39676** **Region 3**

Estrella River

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 26 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and 2 of 12 samples (only the most recent data are compared to this water quality objective) exceed the fish spawning water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats as well as Spawning Habitats. Therefore, the use support rating for this pollutant is set at insufficient information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 26 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and 2 of 12 samples (only the most recent data are compared to this water quality objective) exceed the fish spawning water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39676, Oxygen, Dissolved **Region 3**

Estrella River

LOE ID:	13931
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39676, Oxygen, Dissolved **Region 3**

Estrella River

LOE ID:	17996
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39676, Oxygen, Dissolved **Region 3**

Estrella River

LOE ID:	13932
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39676, Oxygen, Dissolved **Region 3**

Estrella River

LOE ID:	48567
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to

	determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39676, Oxygen, Dissolved **Region 3**

Estrella River

LOE ID:	48568
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39676, Oxygen, Dissolved **Region 3**

Estrella River

LOE ID:	48276
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **39692** **Region 3**

Estrella River

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the

pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39692, Specific Conductivity **Region 3**

Estrella River

LOE ID:	17644
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39692, Specific Conductivity **Region 3**

Estrella River

LOE ID:	48546
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39692, Specific Conductivity **Region 3**

Estrella River

LOE ID:	13884

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Estrella River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [Airport Rd, River Rd]
Temporal Representation:	Data was collected over the time period 3/5/2001-3/9/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39692, Specific Conductivity **Region 3**

Estrella River

LOE ID:	12038
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47249**	**Region 3**
Estrella River		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. One LOE summarizes sediment samples. Zero sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, one total sample is available to assess toxic effects in sediment samples. Zero of the one sediment sample resulted in a significant toxic effect to one or more test organisms. One LOE summarizes water samples. Zero water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and four additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in water samples. Two of the four water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 4 water samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47249, Toxicity **Region 3**

Estrella River

LOE ID:	59006
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample was assessed for toxicity in sediment samples from the Estrella River. The sample did not exhibit significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site (Estrella River at Estrella River Road- 317ESE). This site is also referred to as 309ESE in error.
Temporal Representation:	Data was collected on 4/14/08
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47249, Toxicity **Region 3**

Estrella River

LOE ID:	59005
Pollutant:	Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four samples were assessed for toxicity in water samples from the Estrella River. Two of the four samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The sample collected on 1/24/08 resulted in significant toxic effects to reproduction of Ceriodaphnia dubia and to the growth of Pimephales promelas. The sample collected on 2/23/08 resulted in significant toxicity to the growth of Pimephales promelas.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site (Estrella River at Estrella River Road- 317ESE). This site is also referred to as 309ESE in error.
Temporal Representation:	Samples were collected quarterly between 1/24/2008-11/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **39777** **Region 3**

Estrella River

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Ten the 21 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten the 21 samples exceed the warm freshwater habitat evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39777, Turbidity **Region 3**

Estrella River

LOE ID:	13949
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39777, Turbidity **Region 3**

Estrella River

LOE ID:	18705
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39777, Turbidity — Region 3

Estrella River

LOE ID:	48428
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Estrella River to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [Estrella River]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39157 — Region 3

Estrella River

Pollutant:	**Boron**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
TMDL Name:	Estrella River Basin Boron TMDL
TMDL Project Code:	1084
Date TMDL Approved by USEPA:	02/13/2014
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Eight of 9 samples exceed the water quality objective for Agricultural Supply. This supports rejection of the null hypothesis. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of 9 samples exceed the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. 4. The Estrella River Basin TMDLs for Boron has been approved by the USEPA on February 13, 2014. 5.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39157, Boron **Region 3**

Estrella River

LOE ID:	10522
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 8 of 9 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39745**	**Region 3**
Estrella River		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence is available in the administrative record to assess this pollutant. Four of the 9 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Two of the 9 samples exceed the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 9 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39745, Escherichia coli (E. coli)	**Region 3**
Estrella River	

LOE ID:	18330
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39745, Escherichia coli (E. coli) **Region 3**

Estrella River

LOE ID:	18331
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39745, Escherichia coli (E. coli) Region 3

Estrella River

LOE ID:	12040
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39745, Escherichia coli (E. coli) **Region 3**

Estrella River

LOE ID:	12039
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39110** **Region 3**

Estrella River

Pollutant:	**Chloride**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Ten of 11 samples exceed the water quality objective for Agricultural Supply and therefore support rejection of the null hypothesis. However, the water bearing formations in this watershed are Alluvium and Cuyama Morales Formations. These formations are likely to contribute to elevated salt levels and pH in the surface water and therefore this may be a natural condition. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 11 samples exceed the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39110, Chloride **Region 3**

Estrella River

LOE ID:	10523
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39632**	**Region 3**
Estrella River		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Seven of 11 samples exceed the water quality objective for Water Contact Recreation. This supports rejection of the null hypothesis. Two of 11 samples exceed the objective for Non-Contact Recreation. There is insuffient evidence to show that this beneficial use is fully supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 11 samples exceed the water quality objective for Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39632, Fecal Coliform **Region 3**

Estrella River

LOE ID:	12312
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 6 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 3/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39632, Fecal Coliform **Region 3**

Estrella River

LOE ID:	17383
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39632, Fecal Coliform **Region 3**

Estrella River

LOE ID:	17384
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Estrella River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 1 monitoring site [317-ESTRE-43 - Estrella River at Whitley Gardens]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39632, Fecal Coliform **Region 3**

Estrella River

LOE ID:	12313
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 3/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39281** **Region 3**

Estrella River

Pollutant:	**Sodium**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Nine of 9 samples exceed the water quality objective for Agricultural Supply. This supports rejection of the null hypothesis. However, the water bearing formations in this watershed are Alluvium and Cuyama Morales Formations. These formations are likely to contribute to elevated salt levels and pH in the surface water and therefore this may be a natural condition. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of 9 samples exceed the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39281, Sodium **Region 3**

Estrella River

LOE ID:	10539
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Estrella River to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Estrella River was collected at 2 monitoring sites [317ESE-Estrella River at River Road, 317EST-Estrella River at Airport Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Juan Creek (San Benito County)**
Water Body ID: **CAR3052005020090204001958**
Water Body Type: **River & Stream**

DECISION ID **38026** **Region 3**

San Juan Creek (San Benito County)

Pollutant: **Nitrate**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2018
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Two hundred and seventy-two of the 294 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial uses. Thirteen of the 15 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Fifteen of the 15 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat.

The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing for Cold and Warm Freshwater Habitat.

The following is a summary of the supporting evidence:
1) Dissolved oxygen for this water body ranged from 3.86 mg/L to 18.2 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and at times the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody often exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Floating mats ranged up to 85 % cover, occasionally exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration ranged up to 58 ug/L, often exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 3.23 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 66 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentration of 166 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two hundred and seventy-two of the 294 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial uses. Thirteen of the 15 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Fifteen of the 15 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat and there is sufficient supporting evidence of eutrophication in this water segment.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38026, Nitrate **Region 3**

San Juan Creek (San Benito County)

LOE ID:	9362
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 13 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38026, Nitrate **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17708
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	279
Number of Exceedances:	259
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 259 of 279 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/6/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38026, Nitrate **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49015
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 15 of 15 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek (San Benito County)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38026, Nitrate **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49000
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 15 of 15

	samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek (San Benito County)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38026, Nitrate **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49001
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 13 of 15 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek (San Benito County)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 38280 Region 3

San Juan Creek (San Benito County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Sixty-nine of the 245 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. Twenty of the 245 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-nine of the 245 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved Region 3

San Juan Creek (San Benito County)

LOE ID:	11889
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11887
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan

	Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11909
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11905
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11925

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11926
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11927
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11888
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17856
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	199
Number of Exceedances:	63
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 63 of 199 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/12/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17857
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	199
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 17 of 199 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/12/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49016
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49017
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49018
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 10 of 24 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49019
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 10 of 24 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13860
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13861
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13862
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38280, Oxygen, Dissolved **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13863
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 44655 Region 3

San Juan Creek (San Benito County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and five additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess toxic effects in sediment samples. Three of the seven sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Eighteen LOEs summarize water samples. Five water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and nineteen water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-four total samples are available to assess toxic effects in water samples. Eight of the twenty-four water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 7 sediment samples and 10 of the 24 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24403
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar].
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24422
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24390
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24386
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for San Juan Creek (San Benito County) to determine beneficial use

	support and results are as follows: 2 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected on a single day 2/21/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24434
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 1/10/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24411
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected on a single day 5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24256
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected on a single day 2/21/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24259
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24389
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24388
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24424
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 1/10/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24413
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24412
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected on a single day 5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24423
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24402
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24391
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24401
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	24387
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	57871
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to evaluate sediment toxicity. Two of the five samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Two samples from station 305SJA resulted in one or more toxic effects. The sample collected on 5/1/08 has significant toxic effects to both the growth and survival of Hyalella azteca and the sample collected on 4/14/09 has significant effects to survival. It should be noted that one sample included in this data set is not included in this LOE. The sample from station 305SJA on 5/18/06 was included in LOEs for the previous assessment cycle and therefore is not counted again here.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305PRR San Juan Creek @ Prescott Road, 305SJA San Juan Creek at Anzar Road and 305MVR San Juan Creek at Mission Vineyard Rd. near HWY 156.
Temporal Representation:	The samples were collected between April 2007 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	57870
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nineteen samples were collected from three sites on San Juan Creek to evaluate water toxicity. Six of the nineteen samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth, Selenastrum capricornutum growth, Hyalella azteca survival, and Thalassiosira growth. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The following is a summary of the toxic effects at each site: At station 305MVR the sample from 9/30/08 resulted in complete mortality to Hyalella azteca within 96 hours. Multiple toxic effects were reported for samples collected from station 305SJA. The samples collected on 8/22/06, 2/6/09 and 1/19/10 had toxic effects to Ceriodaphnia dubia survival and reproduction; the sample collected on 9/30/09 had significant toxic effects to the alga Thalassiosira; and the sample collected on 3/30/10 had significant toxic effects to both the reproduction of Ceriodaphnia dubia and growth of Selenastrum capricornutum. None of the samples from station 305PRR resulted in significant toxicity to test organisms. It should be noted that the sample from station 305SJA on 2/21/06 is not included in this LOE. That sample was included in LOEs for the previous assessment cycle and therefore is not counted again here.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at three stations - 305PRR San Juan Creek @ Prescott Road, 305SJA San Juan Creek at Anzar Road and 305MVR San Juan Creek at Mission Vineyard Rd. near HWY 156.
Temporal Representation:	The samples were collected from August 2006 - March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	80332
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to evaluate sediment toxicity. Two of the five samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Two samples from station 305SJA resulted in one or more toxic effects. The sample collected on 5/1/08 has significant toxic effects to both the growth and survival of Hyalella azteca and the sample collected on 4/14/09 has significant effects to survival. It should be noted that one sample included in this data set is not included in this LOE. The sample from station 305SJA on 5/18/06 was included in LOEs for the previous assessment cycle and therefore is not counted again here.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305PRR San Juan Creek @ Prescott Road, 305SJA San Juan Creek at Anzar Road and 305MVR San Juan Creek at Mission Vineyard Rd. near HWY 156.
Temporal Representation:	The samples were collected between April 2007 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44655, Toxicity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	80331
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	19
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nineteen samples were collected from three sites on San Juan Creek to evaluate water toxicity. Six of the nineteen samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth, Selenastrum capricornutum growth, Hyalella azteca survival, and Thalassiosira growth. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The following is a summary of the toxic effects at each site: At station 305MVR the sample from 9/30/08 resulted in complete mortality to Hyalella azteca within 96 hours. Multiple toxic effects were reported for samples collected from station 305SJA. The samples collected on 8/22/06, 2/6/09 and 1/19/10 had toxic effects to Ceriodaphnia dubia survival and reproduction; the sample collected on 9/30/09 had significant toxic effects to the alga Thalassiosira; and the sample collected on 3/30/10 had significant toxic effects to both the reproduction of Ceriodaphnia dubia and growth of Selenastrum capricornutum. None of the samples from station 305PRR resulted in significant toxicity to test organisms. It should be noted that the sample from station 305SJA on 2/21/06 is not included in this LOE. That sample was included in LOEs for the previous assessment cycle and therefore is not counted again here.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at three stations - 305PRR San Juan Creek @ Prescott Road, 305SJA San Juan Creek at Anzar Road and 305MVR San Juan Creek at Mission Vineyard Rd. near HWY 156.
Temporal Representation:	The samples were collected from August 2006 - March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 38588 Region 3

San Juan Creek (San Benito County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 92 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 22 of the 92 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-four of the 92 samples exceed the evaluation guideline for Cold Freshwater Habitat and 22 of the 92 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38588, Turbidity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11907
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 7/19/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38588, Turbidity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11908
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 7/19/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38588, Turbidity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13883
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38588, Turbidity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49050
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 5 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38588, Turbidity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49051
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass

Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38588, Turbidity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17543
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 18 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 2 monitoring sites [Anzar Rd., SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 9/28/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38588, Turbidity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13899
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38588, Turbidity **Region 3**

San Juan Creek (San Benito County)

LOE ID:	16928
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use

	support and results are as follows: 18 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 2 monitoring sites [Anzar Rd., SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 9/28/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39559 Region 3

San Juan Creek (San Benito County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 29 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 305 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the water quality objective for unionized ammonia and zero of the 305 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39559, Ammonia **Region 3**

San Juan Creek (San Benito County)

LOE ID:	48981
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek (San Benito County)]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39559, Ammonia **Region 3**

San Juan Creek (San Benito County)

LOE ID:	9361
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39559, Ammonia **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13844
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-3/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39559, Ammonia **Region 3**

San Juan Creek (San Benito County)

LOE ID:	9359
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39559, Ammonia **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13843
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-3/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39559, Ammonia **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17815

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	278
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 278 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/6/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39559, Ammonia **Region 3**

San Juan Creek (San Benito County)

LOE ID:	48983
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek (San Benito County)]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39559, Ammonia **Region 3**

San Juan Creek (San Benito County)

LOE ID:	48982
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek (San Benito County)]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39559, Ammonia **Region 3**

San Juan Creek (San Benito County)

LOE ID:	9360
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38382 **Region 3**

San Juan Creek (San Benito County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 44 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 44 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38382, Chlorophyll-a **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13845
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural

	Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38382, Chlorophyll-a **Region 3**

San Juan Creek (San Benito County)

LOE ID:	9364
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38382, Chlorophyll-a **Region 3**

San Juan Creek (San Benito County)

LOE ID:	9363
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38382, Chlorophyll-a **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13846
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38382, Chlorophyll-a **Region 3**

San Juan Creek (San Benito County)

LOE ID:	48999
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38382, Chlorophyll-a **Region 3**

San Juan Creek (San Benito County)

LOE ID:	48998
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **38027** **Region 3**

San Juan Creek (San Benito County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Four of the 246 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 246 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38027, Temperature, water **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13900
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters,

	Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38027, Temperature, water **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11906
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38027, Temperature, water **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11928
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38027, Temperature, water **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49052
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38027, Temperature, water **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17415
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	199
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 2 of 199 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/12/2002-2/9/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37711 Region 3

San Juan Creek (San Benito County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Twenty of the 278 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, and 49 of the 278 samples exceeded the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty of the 278 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, and 49 of the 278 samples exceeded the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37711, pH Region 3

San Juan Creek (San Benito County)

LOE ID:	11199
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17558
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	232
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 39 of 232 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/12/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11201
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11215
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11216
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13879
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13880
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13881
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13864
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	13882
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

quality data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJA - San Juan Creek at Anzar Road]

Temporal Representation: Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID: 11235

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]

Temporal Representation: Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11236
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11217
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11218
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and

	Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11219
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11200
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17572
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	232
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 39 of 232 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/12/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17557
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	232
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 39 of 232 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/12/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17556
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	232
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 14 of 232 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/12/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	17573
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	232
Number of Exceedances:	14

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 14 of 232 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 4 monitoring sites [Anzar Rd., SJ-101 - San Juan Creek at Highway 101, highway 156, SJ-PA - San Juan Creek at Pajaro River junction]
Temporal Representation:	Data was collected over the time period 11/12/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49038
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 6 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49037
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 10 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49036
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	24
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 10 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49035
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 10 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan

	Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37711, pH **Region 3**

San Juan Creek (San Benito County)

LOE ID:	49034
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 6 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 3 monitoring sites [305SJA - San Juan Creek (San Benito County), 305MVR - San Juan Creek, 305PRR - San Juan Creek at Prescott Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 38172 **Region 3**

San Juan Creek (San Benito County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Ten of 15 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 3 of 15 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 15 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Pajaro River Fecal Coliform TMDL has been approved by USEPA on 08/03/2010.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38172, Fecal Coliform **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11181
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 10 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38172, Fecal Coliform **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11182
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41580 Region 3

San Juan Creek (San Benito County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two water samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, this decision will not use these two samples because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single sediment sample (pore water) will not be used in the assessment because the lab detected chlorpyrifos but was unable to quantify the result because the reporting limit exceeds the evaluation guideline. Therefore, the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41580, Chlorpyrifos **Region 3**

San Juan Creek (San Benito County)

LOE ID:	16110
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41580, Chlorpyrifos **Region 3**

San Juan Creek (San Benito County)

LOE ID:	16109
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41580, Chlorpyrifos **Region 3**

San Juan Creek (San Benito County)

LOE ID:	16312
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41580, Chlorpyrifos **Region 3**

San Juan Creek (San Benito County)

LOE ID:	16313
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41417 Region 3

San Juan Creek (San Benito County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of two samples exceeded the evaluation guideline and the single sediment sample (pore water) did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy, nor will LOEs summarizing pore water result in the sole basis for any decision.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41417, Diazinon **Region 3**

San Juan Creek (San Benito County)

LOE ID:	16723
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41417, Diazinon **Region 3**

San Juan Creek (San Benito County)

LOE ID:	16736
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41417, Diazinon **Region 3**

San Juan Creek (San Benito County)

LOE ID:	16702
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41417, Diazinon **Region 3**

San Juan Creek (San Benito County)

LOE ID:	16716
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38384 Region 3

San Juan Creek (San Benito County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Nine of 15 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 15 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of 15 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38384, Escherichia coli (E. coli) **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11197
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 9 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38384, Escherichia coli (E. coli) **Region 3**

San Juan Creek (San Benito County)

LOE ID:	11198

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Juan Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Juan Creek (San Benito County) was collected at 1 monitoring site [305SJN-San Juan Creek at Anzar]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Monica Creek**
Water Body ID: **CAR3153402020020124142850**
Water Body Type: **River & Stream**

DECISION ID **37236** **Region 3**
Santa Monica Creek

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'.

Four lines of evidence are available in the administrative record to assess this pollutant. Eight of 20 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 0 of 20 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 20 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37236, Fecal Coliform **Region 3**
Santa Monica Creek

LOE ID: 52064

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37236, Fecal Coliform **Region 3**

Santa Monica Creek

LOE ID:	52205
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37236, Fecal Coliform **Region 3**

Santa Monica Creek

LOE ID:	12325
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 6 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [

	315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37236, Fecal Coliform **Region 3**

Santa Monica Creek

LOE ID:	12326
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37693** **Region 3**

Santa Monica Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Fifteen of the 25 samples exceed the water quality objectives for Cold Freshwater Habitats, Warm Freshwater Habitats and Agricultural Supply. Eighteen of the 25 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of the 25 samples exceed the water quality objectives for Cold Freshwater Habitats, Warm Freshwater Habitats and Agricultural Supply. Eighteen of the 25 samples exceed the water quality objectives for Drinking Water and Recreation. All of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37693, pH — Region 3

Santa Monica Creek

LOE ID:	12363
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 10 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12366
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]

Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12367
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12383
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12384
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5

	nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12385
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12365
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12345
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 13 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12346
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 13 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12347
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 13 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12343
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 10 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	12344
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	10

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 10 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	52206
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [

	315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	52294
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	52228
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	52063
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	52066
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37693, pH **Region 3**

Santa Monica Creek

LOE ID:	52332
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38731**	**Region 3**
Santa Monica Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 20 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 22 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 20 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 22 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38731, Ammonia **Region 3**

Santa Monica Creek

LOE ID:	52208
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 38731, Ammonia **Region 3**

Santa Monica Creek

LOE ID:	52296
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38731, Ammonia **Region 3**

Santa Monica Creek

LOE ID:	52335
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38731, Ammonia **Region 3**

Santa Monica Creek

LOE ID:	10605
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38731, Ammonia **Region 3**

Santa Monica Creek

LOE ID:	10604
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38731, Ammonia **Region 3**

Santa Monica Creek

LOE ID:	10606
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38069** **Region 3**

Santa Monica Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38069, Boron **Region 3**

Santa Monica Creek

LOE ID:	10619
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38069, Boron **Region 3**

Santa Monica Creek

LOE ID:	52262
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38070** **Region 3**

Santa Monica Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38070, Chloride — Region 3

Santa Monica Creek

LOE ID:	52277
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38070, Chloride **Region 3**

Santa Monica Creek

LOE ID:	10620
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]

Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38732 Region 3

Santa Monica Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38732, Chlorophyll-a Region 3

Santa Monica Creek

LOE ID:	10621
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38732, Chlorophyll-a **Region 3**

Santa Monica Creek

LOE ID:	10622
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38732, Chlorophyll-a **Region 3**

Santa Monica Creek

LOE ID:	52209
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek

	to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38732, Chlorophyll-a **Region 3**

Santa Monica Creek

LOE ID:	52311
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42327**	**Region 3**
Santa Monica Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. The single sediment samples (pore water) did not exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Additionally, this decision will not use any of the samples mentioned above in the final count because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42327, Chlorpyrifos **Region 3**

Santa Monica Creek

LOE ID:	16185
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples

	(collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42327, Chlorpyrifos **Region 3**

Santa Monica Creek

LOE ID:	16184
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42327, Chlorpyrifos **Region 3**

Santa Monica Creek

LOE ID:	47697

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory data method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the listing policy.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [Santa Monica Creek @ Carpenteria Avenue - 315SMCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42327, Chlorpyrifos **Region 3**

Santa Monica Creek

LOE ID:	47704
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory data method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the listing policy.

Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [Santa Monica Creek @ Carpenteria Avenue - 315SMCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**42366**	**Region 3**
Santa Monica Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two water samples exceeded the aquatic life evaluation guideline (Finlayson, 2004). The single sediment sample (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of two water samples exceeded the aquatic life evaluation guideline (Finalyson, 2004). The single sediment sample (pore water) did not exceed the aquatic life evaluation guideline; however this sample will not be included in the exceedance count because the criteria used are specific to water samples, not sediment pore water. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42366, Diazinon **Region 3**

Santa Monica Creek

LOE ID:	47715
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [Santa Monica Creek @ Carpenteria Avenue - 315SMCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42366, Diazinon **Region 3**

Santa Monica Creek

LOE ID:	47707
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [Santa Monica Creek @ Carpenteria Avenue - 315SMCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42366, Diazinon **Region 3**

Santa Monica Creek

LOE ID:	16686
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Monica Creek to determine beneficial use support and results are as follows:

	0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42366, Diazinon **Region 3**

Santa Monica Creek

LOE ID:	16699
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48826**	**Region 3**
Santa Monica Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. One of 6 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.One of 6 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48826, Escherichia coli (E. coli) **Region 3**

Santa Monica Creek

LOE ID:	52065
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37690** **Region 3**

Santa Monica Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. One of the 7 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 7 nitrate/nitrite samples exceed the water quality

objectives for Municipal and Domestic Supply. One of the 7 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 22 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37690, Nitrate **Region 3**

Santa Monica Creek

LOE ID:	52225
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37690, Nitrate **Region 3**

Santa Monica Creek

LOE ID:	52061
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37690, Nitrate **Region 3**

Santa Monica Creek

LOE ID:	52313
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37690, Nitrate **Region 3**

Santa Monica Creek

LOE ID:	52312
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek

	to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37690, Nitrate **Region 3**

Santa Monica Creek

LOE ID:	52062
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37690, Nitrate **Region 3**

Santa Monica Creek

LOE ID:	52279
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37690, Nitrate **Region 3**

Santa Monica Creek

LOE ID:	52224
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37690, Nitrate **Region 3**

Santa Monica Creek

LOE ID:	10636
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37690, Nitrate **Region 3**

Santa Monica Creek

LOE ID:	10637
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**53534**	**Region 3**
Santa Monica Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the seven samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the seven samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53534, Nitrogen, Nitrite **Region 3**

Santa Monica Creek

LOE ID:	52293
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37255** **Region 3**

Santa Monica Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. One of the 25 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 25 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 25 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 25 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	52314
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	52227
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved — Region 3

Santa Monica Creek

LOE ID:	52315
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved — Region 3

Santa Monica Creek

LOE ID:	52226
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the

	criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	14134
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	14135
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	14027

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	14026
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	14067
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	14065
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	14064
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37255, Oxygen, Dissolved **Region 3**

Santa Monica Creek

LOE ID:	14066
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37309**	**Region 3**
Santa Monica Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37309, Sodium — Region 3

Santa Monica Creek

LOE ID:	10638
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37309, Sodium — Region 3

Santa Monica Creek

LOE ID:	52295
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38067** **Region 3**

Santa Monica Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 25 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 25 samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38067, Specific Conductivity **Region 3**

Santa Monica Creek

LOE ID:	52278
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 38067, Specific Conductivity **Region 3**

Santa Monica Creek

LOE ID:	12327
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38067, Specific Conductivity **Region 3**

Santa Monica Creek

LOE ID:	12364
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37642**	**Region 3**
Santa Monica Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Although five of the 25 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature, this guideline is specific to steelhead trout and that species is not present, nor is there record of historic populations in this watershed. Therefore, the use support rating is set to insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The evaluation guideline is not relevant for this water segment.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because evaluation guideline is not relevant for this water segment.

Line of Evidence (LOE) for Decision ID 37642, Temperature, water **Region 3**

Santa Monica Creek

LOE ID:	14087
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37642, Temperature, water **Region 3**

Santa Monica Creek

LOE ID:	14046
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37642, Temperature, water **Region 3**

Santa Monica Creek

LOE ID:	52334
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37702**	**Region 3**
Santa Monica Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize sediment samples. The single sediment sample did not result in a significant toxic effect to one or more test organisms. Six LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and one water sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in water samples. One of the three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient

information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample and one of three water samples resulted in a significant toxic effect to one or more test organisms. However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37702, Toxicity **Region 3**

Santa Monica Creek

LOE ID:	58266
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The sample weas collected at station 315SMCxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37702, Toxicity **Region 3**

Santa Monica Creek

LOE ID:	80352
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample weas collected at station 315SMCxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37702, Toxicity **Region 3**

Santa Monica Creek

LOE ID:	80351
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315SMCxxx.
Temporal Representation:	The samples were collected in January 2009.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37702, Toxicity **Region 3**

Santa Monica Creek

LOE ID:	58267
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test

	results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315SMCxxx.
Temporal Representation:	The samples were collected in January 2009.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37702, Toxicity **Region 3**

Santa Monica Creek

LOE ID:	24349
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37702, Toxicity **Region 3**

Santa Monica Creek

LOE ID:	24365
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [

	315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37702, Toxicity **Region 3**

Santa Monica Creek

LOE ID:	24356
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37702, Toxicity **Region 3**

Santa Monica Creek

LOE ID:	24366
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39459** **Region 3**

Santa Monica Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. However, this evaluation guideline is not appropriate for this water segment. There is no current or potential fish habitat in this creek and the evaluation guideline are specific to fish.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the evaluation guideline is not relevant for this water segment.

Line of Evidence (LOE) for Decision ID 39459, Turbidity **Region 3**

Santa Monica Creek

LOE ID:	14044
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39459, Turbidity **Region 3**

Santa Monica Creek

LOE ID:	14045
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Monica Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39459, Turbidity **Region 3**

Santa Monica Creek

LOE ID:	14085
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39459, Turbidity **Region 3**

Santa Monica Creek

LOE ID:	14086
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Monica Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39459, Turbidity **Region 3**

Santa Monica Creek

LOE ID:	52333
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39459, Turbidity **Region 3**

Santa Monica Creek

LOE ID:	52243
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Monica Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Monica Creek was collected at 1 monitoring site [315SMC-Santa Monica Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/28/2008-1/28/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Franklin Creek (Santa Barbara County)**
Water Body ID: **CAR3153402019990225134357**
Water Body Type: **River & Stream**

DECISION ID	39986	Region 3
Franklin Creek (Santa Barbara County)		

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. One of the three water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. This decision will not use one water sample because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of two samples exceeded the USEPA drinking water health advisory. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. The single pore water sample collected on March 31, 2004 contributed to the original listing during the 2010 listing cycle. This decision does not use pore water samples in the exceedance count. Additionally, two pore water samples are not included in this decision because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of three samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48449
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48450

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	47728
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	47644
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water

	results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16140
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16141
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16106
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16105
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54221
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54228
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39986, Chlorpyrifos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54227
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and the laboratory reporting limit was above the evaluation guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39685 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant: **Escherichia coli (E. coli)**

Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Fifty of the 65 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty of the 65 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39685, Escherichia coli (E. coli) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	12201
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 17 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39685, Escherichia coli (E. coli) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	12202
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39685, Escherichia coli (E. coli) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50508
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	33
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 33 of 41 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40432 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 and 4.3 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Seventy-three of the 102 samples exceed the water quality objective for contact recreation (i.e. swimming) and 16 of the 102 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy-three of the 102 samples exceed the water quality objective for contact recreation (i.e. swimming) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40432, Fecal Coliform **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50507
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	35
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 35 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40432, Fecal Coliform **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50524
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 9 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40432, Fecal Coliform **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	12467
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	61
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 7 of 61 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40432, Fecal Coliform **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	12466
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	38
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 38 of 61 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39128 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Seventeen lines of evidence are available in the administrative record to assess this pollutant. Four of the 114 nitrate samples exceed the water quality objectives for the Agricultural beneficial use. One hundred and six of the 114 nitrate samples and 86 of the 92 nitrate/nitrite samples exceed the water quality objectives for the Agricultural beneficial use. Fifty-three of the 53 nitrate samples and 80 of the 80 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 1) Dissolved oxygen for this water body ranged from 5.1 mg/L to 23.9 mg/L, exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and exceeding the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Floating algal mats ranged from 0 to 95 % cover, frequently exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3) Water column chlorophyll a concentration ranged up to 311 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 5.19 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). 5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 125 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60

grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 311 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Four of the 114 nitrate samples exceed the water quality objectives for the Agricultural beneficial use. One hundred and six of the 114 nitrate samples and 86 of the 92 nitrate/nitrite samples exceed the water quality objectives for the Municipal beneficial use. Fifty-three of the 53 nitrate samples and 80 of the 80 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat . These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment..
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14271
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).

Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48498
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 36 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48512

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48480
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48481
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48495
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10463
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	61
Number of Exceedances:	57
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 57 of 61 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48479

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10448
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	61
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 61 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48497
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50505
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 38 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50504
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 38 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50465
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50464
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50544
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring

	site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50543
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39128, Nitrate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50427
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40040 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Ninety of the 95 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ninety of the 95 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40040, Sodium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50446
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 38 of 41 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]

Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40040, Sodium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10464
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	52
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 52 of 54 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40206 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Forty-eight of the 153 samples exceed the water quality objective for Agricultural supply, 65 of the 153 samples exceeded the water quality objectives for Drinking Water and Recreation and 31 of the 153 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-eight of the 153 samples exceed the water quality objective for Agricultural supply, 65 of the 153 samples exceeded the water quality objectives for Drinking Water and Recreation and 31 of the 153 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Each of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14350
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14268
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14364
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14365
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14366
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	12200
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	64
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 17 of 64 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48535
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 7 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48534

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 7 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	12181
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	64
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 22 of 64 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	12182
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	64
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 17 of 64 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	12183
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	64
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 31 of 64 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	12184
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	64
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 31 of 64 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	12185
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	64
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 31 of 64 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5

	nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48550
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48533
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48532
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 6 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48536
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 7 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14351
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50445
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	41
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 19 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50525
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 25 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50484
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 8 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50523

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 25 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50561
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 8 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40206, pH **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50506
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 25 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39234 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant: Ammonia

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which 4 of the 139 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 156 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 139 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 156 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10428
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14317
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14318
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10429
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 61 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10430
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue].
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48431
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 4/9/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15317
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48429
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48430
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB

	County) to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 4/9/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50487
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring

	site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50447
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39234, Ammonia **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50527
Pollutant:	Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47250 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47250, Azinphos-methyl (Guthion) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54210
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47250, Azinphos-methyl (Guthion) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54204
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47273 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (Amweg et al. (2005) and Amweg and Weston (2007)) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a

minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47273, Bifenthrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54212
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47273, Bifenthrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54211
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39939 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 95 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 95 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39939, Boron — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	50114
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39939, Boron **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10431
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	47287	Region 3
Franklin Creek (Santa Barbara County)		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47287, Chlordane	**Region 3**
Franklin Creek (Santa Barbara County)	

LOE ID:	54213
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 samples collected exceeded the criteria for chlordane concentration (Sum of trans-Chlordane, cis-Chlordane, cis-Nonachlor, trans-Nonachlor, and Oxychlordane).

Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses. (Water Quality Control Plan for the Central Coastal Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Probable Effect Concentration for Chlordane in freshwater sediments is 17.6 ug/kg(MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 315FRCxxx (315FRC-Franklin Creek at Carpenteria Avenue).
Temporal Representation:	The samples were collected on 1/6/2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 39838 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Five of the 93 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 93 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39838, Chloride Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	50425
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39838, Chloride **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10445
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	Franklin Creek (SB County) to determine beneficial use support and results are as follows: 4 of 54 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39602 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Six of the 148 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 148 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39602, Chlorophyll-a **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10446
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 61 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39602, Chlorophyll-a **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	10447
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 61 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39602, Chlorophyll-a **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14332

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39602, Chlorophyll-a **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14331
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39602, Chlorophyll-a **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48447
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39602, Chlorophyll-a **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48448
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Chlorophyll a.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39602, Chlorophyll-a **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50542
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39602, Chlorophyll-a **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50463
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47274 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47274, Cyfluthrin Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54236

Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47274, Cyfluthrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54229
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.

Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47275 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Three lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. This sample from January of 2007, was also tested for toxic effects to an invertebrate test organism in sediment (see LOE 54162). The sediment sample did result in significant toxic effects to the test organism. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did exceed the evaluation guideline for Lambda Cyhalothrin and also resulted in significant toxic effects uses but this does not exceed the allowable frequency listed in Table

3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47275, Cyhalothrin, Lambda **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54237
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47275, Cyhalothrin, Lambda **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54162
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315FRCxxx.
Temporal Representation:	The samples were collected in January 2007.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47275, Cyhalothrin, Lambda **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54238
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to

	determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47276 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (Maund et al., 2002) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life uses and this

	does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47276, Cypermethrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54245
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47276, Cypermethrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54239
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47279 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single

sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47279, DDD (Dichlorodiphenyldichloroethane) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54246
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1

	monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47279, DDD (Dichlorodiphenyldichloroethane) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54247
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47280 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47280, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54248
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47280, DDE (Dichlorodiphenyldichloroethylene) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54146
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID 47281 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47281, DDT (Dichlorodiphenyltrichloroethane) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54148
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for DDT.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47281, DDT (Dichlorodiphenyltrichloroethane) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54150
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47281, DDT (Dichlorodiphenyltrichloroethane) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54252
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47281, DDT (Dichlorodiphenyltrichloroethane) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54147
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47277 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47277, Deltamethrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54155
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1

	monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47277, Deltamethrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54149
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47251 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant: Demeton

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47251, Demeton **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54157
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47251, Demeton **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54156
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39709 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Eleven lines of evidence are available in the administrative record to assess this pollutant. One of the four samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. One of the three pore water samples exceeded the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One out of four samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54160
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54165
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1

	monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54166
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16798

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16789
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16799
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16788
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring

	site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	47660
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	47675
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48467
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39709, Diazinon **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48466
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47252 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (maximum acceptable toxicant concentration (USEPA Office of Pesticide Programs, 2011)). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47252, Dichlorvos Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54168
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47252, Dichlorvos **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54167
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39872 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 sediment samples exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39872, Dieldrin — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54170
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39872, Dieldrin — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54169
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39872, Dieldrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16629
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39872, Dieldrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16630
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39872, Dieldrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16616
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39872, Dieldrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16631
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47253 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline for aquatic life protection (USEPA Office of Pesticide Programs, 2011) and zero of 2 sample exceed the evaluation guideline for drinking water (California Department of Health Services notification level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 2 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47253, Dimethoate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54172
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47253, Dimethoate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54171
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47253, Dimethoate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54173
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity

	database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47254 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47254, Disulfoton Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54176
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39902 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 3 sediment samples exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39902, Endrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54178
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39902, Endrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54177
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39902, Endrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16452
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as

	follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39902, Endrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16450
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39902, Endrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16449
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39902, Endrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16451

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47282 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples

is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47282, Esfenvalerate/Fenvalerate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54179
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]

Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47282, Esfenvalerate/Fenvalerate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54180
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47264 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (maximum acceptable toxicant concentration (USEPA Office of Pesticide Programs, 2011). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47264, Ethoprop **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54181
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47264, Ethoprop **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54182
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47283 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (Ding et al., 2011) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47283, Fenpropathrin Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54183
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47283, Fenpropathrin **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54184
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47284 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample result was not used in the assessment because it could not be quantified and therefore, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47284, Fipronil — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54186
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47284, Fipronil — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54185
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47285 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample result was not used in the assessment because it could not be quantified and therefore, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47285, Fipronil Sulfide **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54188
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47285, Fipronil Sulfide **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54187
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47286 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample result was not used in the assessment because it could not be quantified and therefore, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47286, Fipronil Sulfone **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54189
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47286, Fipronil Sulfone **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54190
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The single sample result was not used in the assessment because it is qualified as a non-detect and staff determined that the organic carbon normalized method detection limit was above the guideline and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.

Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47288 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47288, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54191
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47288, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54192
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47266 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline for aquatic life uses (Palumbo, A.J., et al., 2012) and zero of the 2 sample exceed the USEPA drinking water health advisory level. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47266, Malathion — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54195
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47266, Malathion — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54193
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the

	criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47266, Malathion **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54194
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

DECISION ID 47267 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined in USEPA, 1985) and zero of the 2 sample exceed the USEPA drinking water health advisory level. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47267, Methidathion **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54198
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to

	determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47267, Methidathion **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54197
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined

	in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47267, Methidathion **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54196
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47268 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline for aquatic life uses (California Department of Fish and Wildlife, 1992) and zero of the 2 sample exceed the USEPA drinking water health advisory level.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47268, Methyl Parathion **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54205
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47268, Methyl Parathion **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54199
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47268, Methyl Parathion **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54200
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47269 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 41 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 41 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47269, Nitrogen, Nitrite **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50444
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	39179	Region 3
Franklin Creek (Santa Barbara County)		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Nine of the 153 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 1 of the 153 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Fifteen of the 153 samples are below 85% saturation, but the median of the data does not exceed (fall below) the Objective. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for this pollutant is set at fully supporting. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 153 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 1 of the 153 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved	**Region 3**
Franklin Creek (Santa Barbara County)	

LOE ID:	50545
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 41 samples

	exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50483
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50466
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50560
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	13147
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	64
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 4 of 64 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	13146
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	64
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 4 of 64 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14348

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48516
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB

	County) to determine beneficial use support and results are as follows: 8 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14333
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	13113
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	64
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 4 of 64 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14349
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48515
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	13114
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	64
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 64 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring

	site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48531
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 8 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48513
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39179, Oxygen, Dissolved **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14334
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47270 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 sample exceed the National Recommended Water Quality Criteria for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47270, Parathion **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54223
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47270, Parathion **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54222
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47278 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47278, Permethrin, total **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54225
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47278, Permethrin, total **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54224
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, Total.
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek at 7th Street - 315FRCxxx]
Temporal Representation:	Data was collected on a single day 1/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47271 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) and zero of the 2 sample exceed the National Academy of Sciences drinking water health advisory level. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47271, Phorate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54240
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47271, Phorate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54235

Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47271, Phorate **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54241
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47272 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) and zero of the 2 sample exceed the USEPA drinking water health advisory level. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47272, Phosmet Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	54242
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47272, Phosmet **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54244
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47272, Phosmet **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54243
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Franklin Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Franklin Creek (Santa Barbara County) was collected at 1 monitoring site [Franklin Creek - 315FMV]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	39180	Region 3
Franklin Creek (Santa Barbara County)		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 141 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 141 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39180, Specific Conductivity	**Region 3**
Franklin Creek (Santa Barbara County)	

LOE ID:	12468
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	64
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 64 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39180, Specific Conductivity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48465
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39180, Specific Conductivity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50426
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40084** **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-one of 156 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. However, a recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) categorizes Franklin Creek as having "Possibly Absent" and specifically cites the following: a 202 DFG reports cites Irving Treloar as having caught rainbow trout in Franklin Creek, likely in the 1930 or 1940s. However, since the conversion of this creek to a cement box channel there is no habitat in the lower reaches. Therefore this temperature guideline is not relevant to this water body. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The temperature guideline is not relevant to this water body. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this temperature guideline is not relevant to this waterbody.

Line of Evidence (LOE) for Decision ID 40084, Temperature, water — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	50486
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 10 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40084, Temperature, water **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14367
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]

Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40084, Temperature, water **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48553
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40084, Temperature, water **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	13165
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	64
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 14 of 64 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40441 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 126 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity. The evaluation guideline (Sigler et al. 1984) used to evaluate the cold freshwater habitat beneficial use is specific to steelhead trout and is not relevant to this water body. Based on a recent publication

(Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) categorizes steelhead in Franklin Creek as "Possibly Absent" and specifically cites that since the conversion of this creek to a cement box channel there is no habitat in the lower reaches.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Twenty-four of the 126 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The cold freshwater habitat evaluation guideline is not relevant for this water body.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40441, Turbidity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48552
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 10 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40441, Turbidity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14283
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40441, Turbidity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	14282
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40441, Turbidity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	13150
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 9 of 55 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40441, Turbidity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	48551
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 10 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek]

Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40441, Turbidity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	13149
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 9 of 55 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40441, Turbidity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50562

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 3 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40441, Turbidity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	50485
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42022 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Twenty-two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Ten LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and five additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess toxic effects in sediment samples. Four of the seven sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Twelve LOEs summarize water samples. Five water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and thirteen additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eighteen total samples are available to assess toxic effects in water samples. Four of the eighteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of seven sediment samples and four of 18 water samples exceed the water quality objective for aquatic life protection and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24239
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24240
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24241
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24205

Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24060
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24059
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24216
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival

	endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24215
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24204
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24061
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring

	site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24062
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	24063
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	24250
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	24064
Pollutant:	Plant Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FMV - Franklin Creek at Mountain View Lane]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	78948
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity to Hyalella Azteca growth and survival.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 315FMV Franklin Creek.
Temporal Representation:	The samples were collected in April 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	78950
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

	control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315FRC - Franklin Creek at Carpinteria Ave.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	78949
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315FRCxxx.
Temporal Representation:	The samples were collected in January 2007.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54152
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity to Hyalella Azteca growth and survival.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 315FMV Franklin Creek.
Temporal Representation:	The samples were collected in April 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54153
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Three of the eleven samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and

	reproduction of Ceriodaphnia dubia (9/23/08, 9/16/09, 3/25/08) and growth of Selenastrum capricornutum (9/23/08, 3/25/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 315FMV Franklin Creek.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54162
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Project Urban Pyrethroid Status Monitoring
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental

	Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315FRCxxx.
Temporal Representation:	The samples were collected in January 2007.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54161
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Both samples were reported with significant reduction in total cell growth of S. capricornutum but neither sample had significant effects to Ceriodaphnia dubia, or Pimephales promelas. The significant effects to S. capricornutum are not counted as an exceedance here because the conductivity of both samples was above the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. The conductivity of the both samples was greater than 1500 uS/cm but the significance of the toxic effect for the sample result was not calculated using the high salinity control sample. Therefore these results are not counted as exceedances.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The samples were collected at station 315FRC - Franklin Creek at Carpinteria Ave.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42022, Toxicity **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	54154
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315FRC - Franklin Creek at Carpinteria Ave.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID 39835 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective for evaluation of aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective, and did not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39835, Anthracene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15685
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39835, Anthracene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15699
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39835, Anthracene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15700
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39835, Anthracene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15686
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39547 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence is available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and

	confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39547, Arsenic **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15787
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39547, Arsenic **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15772

Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39547, Arsenic **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15773
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39547, Arsenic **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15771
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]

Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39791 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective for evaluation of aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39791, Benzo(a)anthracene Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	15827
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39791, Benzo(a)anthracene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15840
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39791, Benzo(a)anthracene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15841
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39791, Benzo(a)anthracene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15826
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39803 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective for evaluation of aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective, and and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39803, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15467
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39803, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	15453
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39803, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	15452
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39803, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15454
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39794 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39794, Cadmium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15554
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39794, Cadmium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15568
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39794, Cadmium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15567
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39794, Cadmium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15553
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39751 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeds the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeds the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39751, Chromium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16010
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39751, Chromium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15995
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39751, Chromium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16009
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39751, Chromium **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16008
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39968 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective for evaluation of aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39968, Chrysene (C1-C4) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16093
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]

Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39968, Chrysene (C1-C4) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16095
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39968, Chrysene (C1-C4) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16092
Pollutant:	Chrysene (C1-C4)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39968, Chrysene (C1-C4) **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16094
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39989 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to the General Objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39989, Copper Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	15940
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39989, Copper **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15911
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39989, Copper **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	15909
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39989, Copper Franklin Creek (Santa Barbara County) **Region 3**

LOE ID:	15910
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40433 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40433, Fluoranthene — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	16534
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40433, Fluoranthene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16535
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40433, Fluoranthene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16536
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40433, Fluoranthene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16549
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40434 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses . Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40434, Fluorene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16400
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40434, Fluorene — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	16414
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40434, Fluorene — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	16413
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40434, Fluorene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16399
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39736 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39736, Lead Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	17249

Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39736, Lead **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17246
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39736, Lead **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17247
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring

	site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39736, Lead Franklin Creek (Santa Barbara County) **Region 3**

LOE ID:	17248
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39753 **Region 3**
Franklin Creek (Santa Barbara County)

Pollutant: Mercury

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39753, Mercury **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17316
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39753, Mercury **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17317
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39753, Mercury **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17330
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39753, Mercury **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17331
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39686 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39686, Naphthalene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17133
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39686, Naphthalene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17146
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39686, Naphthalene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17147
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39686, Naphthalene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17148
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39703 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39703, Nickel Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	16969
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39703, Nickel **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16968
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39703, Nickel **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16967
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39703, Nickel **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16966
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39704 **Region 3**

Franklin Creek (Santa Barbara County)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39704, Phenanthrene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17053
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39704, Phenanthrene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17067
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39704, Phenanthrene — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	17068
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39704, Phenanthrene — Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	17066
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40448 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples

	is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40448, Pyrene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16933
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40448, Pyrene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16932
Pollutant:	Pyrene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40448, Pyrene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16931
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40448, Pyrene **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	16962
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40443 Region 3

Franklin Creek (Santa Barbara County)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40443, Zinc Region 3

Franklin Creek (Santa Barbara County)

LOE ID:	17831
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40443, Zinc **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17829
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40443, Zinc **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17847
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40443, Zinc **Region 3**

Franklin Creek (Santa Barbara County)

LOE ID:	17830
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Franklin Creek (SB County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Franklin Creek (SB County) was collected at 1 monitoring site [315FRC-Franklin Creek at Carpenteria Avenue]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Carpinteria Creek**
Water Body ID: **CAR315340201998082511240 5**
Water Body Type: **River & Stream**

DECISION ID	41964	Region 3
Carpinteria Creek		

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. One of one water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. This decision will not use two of the water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Two of two sediment samples (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. The single pore water sample collected on March 31, 2004 contributed to the original listing during the 2010 listing cycle. This decision does not include pore water samples in the exceedance count. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of one samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41964, Chlorpyrifos **Region 3**

Carpinteria Creek

LOE ID:	16357
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CAU-Carpenteria Creek at Highway 192, 315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41964, Chlorpyrifos — Region 3

Carpinteria Creek

LOE ID:	47719
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [Carpinteria Creek at 8th Street foot bridge - 315CRPxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41964, Chlorpyrifos — Region 3

Carpinteria Creek

LOE ID:	47739
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [Carpinteria Creek at 8th Street foot bridge - 315CRPxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41964, Chlorpyrifos **Region 3**

Carpinteria Creek

LOE ID:	16346
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41964, Chlorpyrifos **Region 3**

Carpinteria Creek

LOE ID:	16345
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

of Fish and Game

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41964, Chlorpyrifos **Region 3**

Carpinteria Creek

LOE ID:	16358
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CAU-Carpenteria Creek at Highway 192, 315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	37747	Region 3
Carpinteria Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 66 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty of the 66 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 37747, Escherichia coli (E. coli)	**Region 3**
Carpinteria Creek	

LOE ID:	12351
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37747, Escherichia coli (E. coli) **Region 3**

Carpinteria Creek

LOE ID:	12350
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 8 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37747, Escherichia coli (E. coli) **Region 3**

Carpinteria Creek

LOE ID:	49762
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 12 of 38 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37747, Escherichia coli (E. coli) **Region 3**

Carpinteria Creek

LOE ID:	49763
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41957**	**Region 3**
Carpinteria Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Thirty-five of the 107 samples exceed the water quality objective for water contact recreation (i.e. swimming, wading etc.) but only 5 of the 107 samples also exceeded the water quality objective for non-contact recreation (i.e. boating). Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-five of the 107 samples exceed the water quality objective for water contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41957, Fecal Coliform **Region 3**

Carpinteria Creek

LOE ID:	49761
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41957, Fecal Coliform — Region 3

Carpinteria Creek

LOE ID:	49775
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41957, Fecal Coliform — Region 3

Carpinteria Creek

LOE ID:	49776
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41957, Fecal Coliform **Region 3**

Carpinteria Creek

LOE ID:	11371
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 18 of 62 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41957, Fecal Coliform **Region 3**

Carpinteria Creek

LOE ID:	49752
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 16 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41957, Fecal Coliform — Region 3

Carpinteria Creek

LOE ID:	11372
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 4 of 62 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41957, Fecal Coliform — Region 3

Carpinteria Creek

LOE ID:	11392
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41957, Fecal Coliform **Region 3**

Carpinteria Creek

LOE ID:	11393
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a

	minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37828**	**Region 3**
Carpinteria Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty lines of evidence (LOEs) lines of evidence are available in the administrative record to assess this pollutant. Twenty-nine of 112 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and 13 of the 112 samples also exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-nine of 112 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision	This decision will be retired. All associated data and information originally included in this assessment

Recommendation: will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13288
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 5 of 62 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13289
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 27 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13290
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 27 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13287
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 13 of 62 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13254
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13253
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13252
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13251
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13310
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13325
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	49817
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 8 of 38 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13309
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	13324
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	49818
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the

	criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	49819
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 18 of 38 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	49820
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	49788
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	18

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 18 of 38 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	49786
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 13 of 38 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	49787
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37828, Oxygen, Dissolved **Region 3**

Carpinteria Creek

LOE ID:	49789
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38592**	**Region 3**
Carpinteria Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Seventy-three of the 100 samples exceed the water quality objective for agricultural supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-three of the 100 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

	4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38592, Sodium **Region 3**

Carpinteria Creek

LOE ID:	49746
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 33 of 38 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38592, Sodium **Region 3**

Carpinteria Creek

LOE ID:	9684
Pollutant:	Sodium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38592, Sodium **Region 3**

Carpinteria Creek

LOE ID:	10579
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 40 of 55 samples exceed the criterion for Sodium.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38592, Sodium **Region 3**

Carpinteria Creek

LOE ID:	49757
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37675**	**Region 3**
Carpinteria Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11798) and total ammonia (Decision 11799). This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which zero of the 106 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 107 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 106 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 107 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This decision will be retired. All associated data and information originally included in this assessment

Recommendation: will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	49812
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	49792
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	49759
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	49758
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-5/18/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	49791
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-5/18/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	9701
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	9715
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	9733
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	9732
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	9702
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4

	samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	49813
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37675, Ammonia **Region 3**

Carpinteria Creek

LOE ID:	9731
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38302** **Region 3**

Carpinteria Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 100 samples exceed the water quality objective for boron and protection of the Agricultural Supply beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 100 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38302, Boron **Region 3**

Carpinteria Creek

LOE ID:	9716
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38302, Boron **Region 3**

Carpinteria Creek

LOE ID:	9734
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38302, Boron **Region 3**

Carpinteria Creek

LOE ID:	49782
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38302, Boron **Region 3**

Carpinteria Creek

LOE ID:	49783
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41833** **Region 3**

Carpinteria Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41833, Chloride **Region 3**

Carpinteria Creek

LOE ID:	9717
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41833, Chloride **Region 3**

Carpinteria Creek

LOE ID:	10561
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	9

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 9 of 55 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41833, Chloride **Region 3**

Carpinteria Creek

LOE ID:	49784
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 21 of 38 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41833, Chloride **Region 3**

Carpinteria Creek

LOE ID:	49795
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41834** **Region 3**

Carpinteria Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One of the 102 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 102 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41834, Chlorophyll-a **Region 3**

Carpinteria Creek

LOE ID:	49794
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to

	determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41834, Chlorophyll-a **Region 3**

Carpinteria Creek

LOE ID:	49793
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41834, Chlorophyll-a **Region 3**

Carpinteria Creek

LOE ID:	49760
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41834, Chlorophyll-a **Region 3**

Carpinteria Creek

LOE ID:	49771
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41834, Chlorophyll-a **Region 3**

Carpinteria Creek

LOE ID:	9685
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41834, Chlorophyll-a **Region 3**

Carpinteria Creek

LOE ID:	9686
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41834, Chlorophyll-a — Region 3

Carpinteria Creek

LOE ID:	10562
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41834, Chlorophyll-a **Region 3**

Carpinteria Creek

LOE ID:	10563
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41965**	**Region 3**
Carpinteria Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. One of the 3 samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of 2 pore water samples exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of three samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41965, Diazinon **Region 3**

Carpinteria Creek

LOE ID:	47673
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [Carpinteria Creek at 8th Street foot bridge - 315CRPxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41965, Diazinon **Region 3**

Carpinteria Creek

LOE ID:	16782
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CAU-Carpenteria Creek at Highway 192, 315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41965, Diazinon **Region 3**

Carpinteria Creek

LOE ID:	16756
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41965, Diazinon **Region 3**

Carpinteria Creek

LOE ID:	16768
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CAU-Carpenteria Creek at Highway 192, 315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41965, Diazinon **Region 3**

Carpinteria Creek

LOE ID:	47658
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [Carpinteria Creek at 8th Street foot bridge - 315CRPxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41965, Diazinon **Region 3**

Carpinteria Creek

LOE ID:	16769
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37683**	**Region 3**
Carpinteria Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 112 samples exceed the water quality objective for Agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 112 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 37683, Specific Conductivity **Region 3**

Carpinteria Creek

LOE ID:	11407
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37683, Specific Conductivity **Region 3**

Carpinteria Creek

LOE ID:	12328

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37683, Specific Conductivity **Region 3**

Carpinteria Creek

LOE ID:	11373
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37683, Specific Conductivity **Region 3**

Carpinteria Creek

LOE ID:	49796
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37683, Specific Conductivity **Region 3**

Carpinteria Creek

LOE ID:	49797
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37744 Region 3

Carpinteria Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 112 samples exceed the evaluation guideline (Moyle 1976) used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 112 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 37744, Temperature, water — Region 3

Carpinteria Creek

LOE ID:	49802
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be

	demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37744, Temperature, water **Region 3**

Carpinteria Creek

LOE ID:	49803
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 37744, Temperature, water **Region 3**

Carpinteria Creek

LOE ID:	13056
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37744, Temperature, water **Region 3**

Carpinteria Creek

LOE ID:	13272
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37744, Temperature, water **Region 3**

Carpinteria Creek

LOE ID:	13308
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41875 Region 3

Carpinteria Creek

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution
Regional Board Staff Conclusion:	The mapped representation of this waterbody was merged, spit or corrected this cycle. This decision is being decommissioned (to be retired next cycle) while a copy of it as a "List" decision now lives with the new mapped representation of this waterbody [Carpinteria Creek (below Gobernador Creek)].
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41875, Toxicity Region 3

Carpinteria Creek

LOE ID:	23801
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CRP-Carpinteria Creek down stream Carpenteria Ave, 315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41875, Toxicity **Region 3**

Carpinteria Creek

LOE ID:	23785
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41875, Toxicity **Region 3**

Carpinteria Creek

LOE ID:	23816
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CRP-Carpinteria Creek down stream Carpenteria Ave, 315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41875, Toxicity **Region 3**

Carpinteria Creek

LOE ID:	23784
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41875, Toxicity **Region 3**

Carpinteria Creek

LOE ID:	23802
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CRP-Carpinteria Creek down stream Carpenteria Ave, 315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41875, Toxicity **Region 3**

Carpinteria Creek

LOE ID:	23815
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 2 monitoring sites [315CRP-Carpinteria Creek down stream Carpenteria Ave, 315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41875, Toxicity **Region 3**

Carpinteria Creek

LOE ID:	78638

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Although both of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count when compared to the control, these samplesÂ's conductivity was greater than 1500 uS/cm, the threshold at which a high salinity control sample should be used to calculate the test statistics. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects, these samples are not counted as exceedances.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315CRP - Carpinteria Creek at 8th street foot bridge.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41875, Toxicity **Region 3**

Carpinteria Creek

LOE ID:	78636
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315CRP - Carpinteria Creek at the 8th St. foot bridge.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41875, Toxicity **Region 3**

Carpinteria Creek

LOE ID:	53926
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Although both of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count when compared to the control, these samplesÂ's conductivity was greater than 1500 uS/cm, the threshold at which a high salinity control sample should be used to calculate the test statistics. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is

	twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects, these samples are not counted as exceedances.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315CRP - Carpinteria Creek at 8th street foot bridge.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41875, Toxicity **Region 3**

Carpinteria Creek

LOE ID:	53927
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.

Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315CRP - Carpinteria Creek at the 8th St. foot bridge.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID **38274** **Region 3**

Carpinteria Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Seven of the 100 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984) and 6 of the 100 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 100 samples exceed the cold freshwater habitat evaluation guideline and 6 of the 100 samples exceed the warm freshwater habitat evaluation guideline. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38274, Turbidity **Region 3**

Carpinteria Creek

LOE ID:	49801
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38274, Turbidity **Region 3**

Carpinteria Creek

LOE ID:	50119
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 2 of 37 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38274, Turbidity **Region 3**

Carpinteria Creek

LOE ID:	50120
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38274, Turbidity **Region 3**

Carpinteria Creek

LOE ID:	49800
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 37 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38274, Turbidity **Region 3**

Carpinteria Creek

LOE ID:	13328
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38274, Turbidity **Region 3**

Carpinteria Creek

LOE ID:	13327
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38274, Turbidity **Region 3**

Carpinteria Creek

LOE ID:	13307
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38274, Turbidity — Region 3

Carpinteria Creek

LOE ID:	13306
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38274, Turbidity — Region 3

Carpinteria Creek

LOE ID:	13270
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38274, Turbidity **Region 3**

Carpinteria Creek

LOE ID:	13271
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38286**	**Region 3**
Carpinteria Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Three of the 112 samples exceed the water quality objective for Agricultural supply, 7 of the 112 samples exceeded the water quality objectives for Drinking Water and Recreation and 1 of the 112 samples exceed the water quality objective for Cold Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Three of the 112 samples exceed the water quality objective for Agricultural supply, 7 of the 112 samples exceeded the water quality objectives for Drinking Water and Recreation and 1 of the 112 samples exceed the water quality objective for Cold Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body

[Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49821
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49822
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to

	determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49744
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49745
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49750

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49751
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	12329
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH — Region 3

Carpinteria Creek

LOE ID:	12348
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH — Region 3

Carpinteria Creek

LOE ID:	12349
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	12330
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	12331
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11347
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11408
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11409
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11410
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11411

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	12332
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11425
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11426
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11427
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11428
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 3 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11429
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11374
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	11346
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 4/2/2001-12/3/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49777
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49778
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49790

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49764
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek at 8th St. Bridge]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49799
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38286, pH **Region 3**

Carpinteria Creek

LOE ID:	49765

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carpinteria Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CAU-Carpenteria Creek at Highway 192]
Temporal Representation:	Data was collected over the time period 1/28/2008-3/25/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37689**	**Region 3**
Carpinteria Creek		

Pollutant:	**Pathogens**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. In the 2010 cycle, Carpinteria Creek was delisted for the general pollutant name 'Pathogens' and this was replaced with decisions for each of the specific pollutants. See Decisions for both Fecal Coliform and E. coli.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body

[Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 37689, Pathogens **Region 3**

Carpinteria Creek

LOE ID:	3935
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID **41948** **Region 3**

Carpinteria Creek

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2

samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41948, Anthracene **Region 3**

Carpinteria Creek

LOE ID:	15654
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41948, Anthracene **Region 3**

Carpinteria Creek

LOE ID:	15652
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41948, Anthracene **Region 3**

Carpinteria Creek

LOE ID:	15651
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41948, Anthracene **Region 3**

Carpinteria Creek

LOE ID:	15653
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38360**	**Region 3**
Carpinteria Creek		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the

	Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38360, Arsenic **Region 3**

Carpinteria Creek

LOE ID:	15736
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38360, Arsenic **Region 3**

Carpinteria Creek

LOE ID:	15737
Pollutant:	Arsenic

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38360, Arsenic **Region 3**

Carpinteria Creek

LOE ID:	15738
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38360, Arsenic **Region 3**

Carpinteria Creek

LOE ID:	15722
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41950 Region 3

Carpinteria Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41950, Benzo(a)anthracene Region 3

Carpinteria Creek

LOE ID:	15792

Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41950, Benzo(a)anthracene **Region 3**

Carpinteria Creek

LOE ID:	15793
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41950, Benzo(a)anthracene **Region 3**

Carpinteria Creek

LOE ID:	15794
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]

Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41950, Benzo(a)anthracene **Region 3**

Carpinteria Creek

LOE ID:	15791
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41949** **Region 3**

Carpinteria Creek

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41949, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Carpinteria Creek

LOE ID:	15406
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41949, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Carpinteria Creek

LOE ID:	15421
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [

	315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41949, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Carpinteria Creek

LOE ID:	15420
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41949, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Carpinteria Creek

LOE ID:	15419

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38303** **Region 3**

Carpinteria Creek

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status

and the pollutant concentration in sediment must be associated with a toxicity to result.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38303, Cadmium **Region 3**

Carpinteria Creek

LOE ID:	15521
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38303, Cadmium **Region 3**

Carpinteria Creek

LOE ID:	15522
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38303, Cadmium **Region 3**

Carpinteria Creek

LOE ID:	15519

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38303, Cadmium **Region 3**

Carpinteria Creek

LOE ID:	15520
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41911**	**Region 3**
Carpinteria Creek		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41911, Chromium **Region 3**

Carpinteria Creek

LOE ID:	15961
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41911, Chromium **Region 3**

Carpinteria Creek

LOE ID:	15963
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41911, Chromium **Region 3**

Carpinteria Creek

LOE ID:	15962
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0

	of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41911, Chromium **Region 3**

Carpinteria Creek

LOE ID:	15976
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42002** **Region 3**

Carpinteria Creek

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 42002, Chrysene (C1-C4) **Region 3**

Carpinteria Creek

LOE ID:	16047
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42002, Chrysene (C1-C4) **Region 3**

Carpinteria Creek

LOE ID:	16046
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001)

	data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42002, Chrysene (C1-C4) **Region 3**

Carpinteria Creek

LOE ID:	16060
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42002, Chrysene (C1-C4) **Region 3**

Carpinteria Creek

LOE ID:	16061
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38347** **Region 3**

Carpinteria Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38347, Copper **Region 3**

Carpinteria Creek

LOE ID:	15878
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38347, Copper **Region 3**

Carpinteria Creek

LOE ID:	15865
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38347, Copper Carpinteria Creek **Region 3**

LOE ID:	15877
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38347, Copper Carpinteria Creek **Region 3**

LOE ID:	15866
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42006**	**Region 3**
Carpinteria Creek		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 42006, Dieldrin **Region 3**

Carpinteria Creek

LOE ID:	16809
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42006, Dieldrin **Region 3**

Carpinteria Creek

LOE ID:	16808
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42006, Dieldrin **Region 3**

Carpinteria Creek

LOE ID:	16806
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42006, Dieldrin **Region 3**

Carpinteria Creek

LOE ID:	16807
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42007**	**Region 3**
Carpinteria Creek		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the

Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 42007, Endrin **Region 3**

Carpinteria Creek

LOE ID:	16403
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42007, Endrin **Region 3**

Carpinteria Creek

LOE ID:	16418

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42007, Endrin **Region 3**

Carpinteria Creek

LOE ID:	16417
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42007, Endrin **Region 3**

Carpinteria Creek

LOE ID:	16404
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]

Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41849 Region 3

Carpinteria Creek

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41849, Fluoranthene Region 3

Carpinteria Creek

LOE ID:	16503

Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41849, Fluoranthene **Region 3**

Carpinteria Creek

LOE ID:	16488
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41849, Fluoranthene **Region 3**

Carpinteria Creek

LOE ID:	16502
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [

	315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41849, Fluoranthene **Region 3**

Carpinteria Creek

LOE ID:	16501
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41850** **Region 3**

Carpinteria Creek

Pollutant: **Fluorene**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41850, Fluorene **Region 3**

Carpinteria Creek

LOE ID:	16365
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0

	of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41850, Fluorene **Region 3**

Carpinteria Creek

LOE ID:	16368
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41850, Fluorene **Region 3**

Carpinteria Creek

LOE ID:	16366
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41850, Fluorene **Region 3**

Carpinteria Creek

LOE ID:	16367

Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37653** **Region 3**

Carpinteria Creek

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the

Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 37653, Lead **Region 3**

Carpinteria Creek

LOE ID:	17214
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37653, Lead **Region 3**

Carpinteria Creek

LOE ID:	17201
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37653, Lead **Region 3**

Carpinteria Creek

LOE ID:	17200
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37653, Lead **Region 3**

Carpinteria Creek

LOE ID:	17215
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0

	of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38333**	**Region 3**
Carpinteria Creek		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38333, Mercury **Region 3**

Carpinteria Creek

LOE ID:	17298
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38333, Mercury **Region 3**

Carpinteria Creek

LOE ID:	17300
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38333, Mercury **Region 3**

Carpinteria Creek

LOE ID:	17299
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38333, Mercury **Region 3**

Carpinteria Creek

LOE ID:	17285
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41999** **Region 3**

Carpinteria Creek

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41999, Naphthalene **Region 3**

Carpinteria Creek

LOE ID:	17352
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41999, Naphthalene **Region 3**

Carpinteria Creek

LOE ID:	17351
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41999, Naphthalene **Region 3**

Carpinteria Creek

LOE ID:	17366
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41999, Naphthalene **Region 3**

Carpinteria Creek

LOE ID:	17353
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38322** **Region 3**

Carpinteria Creek

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38322, Nickel — Region 3

Carpinteria Creek

LOE ID:	16919
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38322, Nickel **Region 3**

Carpinteria Creek

LOE ID:	16935
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38322, Nickel **Region 3**

Carpinteria Creek

LOE ID:	16934
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38322, Nickel **Region 3**

Carpinteria Creek

LOE ID:	16920
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41830** **Region 3**

Carpinteria Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010

listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41830, Phenanthrene **Region 3**

Carpinteria Creek

LOE ID:	17021
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41830, Phenanthrene **Region 3**

Carpinteria Creek

LOE ID:	17034
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41830, Phenanthrene **Region 3**

Carpinteria Creek

LOE ID:	17020
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41830, Phenanthrene **Region 3**

Carpinteria Creek

LOE ID:	17019
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41831**	**Region 3**
Carpinteria Creek		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 41831, Pyrene **Region 3**

Carpinteria Creek

LOE ID:	16898
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41831, Pyrene **Region 3**

Carpinteria Creek

LOE ID:	16897
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41831, Pyrene **Region 3**

Carpinteria Creek

LOE ID:	16896
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41831, Pyrene **Region 3**

Carpinteria Creek

LOE ID:	16883
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38214**	**Region 3**
Carpinteria Creek		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)]. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this water body [Carpinteria Creek (below Gobernador Creek)].

Line of Evidence (LOE) for Decision ID 38214, Zinc **Region 3**

Carpinteria Creek

LOE ID:	17774
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38214, Zinc **Region 3**

Carpinteria Creek

LOE ID:	17793
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38214, Zinc **Region 3**

Carpinteria Creek

LOE ID:	17792
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38214, Zinc **Region 3**

Carpinteria Creek

LOE ID:	17791
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carpinteria Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carpinteria Creek was collected at 1 monitoring site [315CRP-Carpinteria Creek down stream Carpenteria Ave]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Rincon Creek**
Water Body ID: **CAR3153401220020124130528**
Water Body Type: **River & Stream**

DECISION ID **40643** **Region 3**
Rincon Creek

Pollutant: **Turbidity**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 97 samples exceeded the evaluation guidelines for Cold Freshwater Habitat (Sigler et al. 1984) and the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 97 samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 40643, Turbidity **Region 3**
Rincon Creek

LOE ID: 51404

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Central Coast Basin Plan general objective).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40643, Turbidity **Region 3**

Rincon Creek

LOE ID:	51326
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Central Coast Basin Plan general objective)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40643, Turbidity **Region 3**

Rincon Creek

LOE ID:	14102
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 12 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40643, Turbidity **Region 3**

Rincon Creek

LOE ID:	14140
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40643, Turbidity **Region 3**

Rincon Creek

LOE ID:	14139
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40643, Turbidity **Region 3**

Rincon Creek

LOE ID:	14103
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 12 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.

Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 33246 Region 3

Rincon Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-nine of the 96 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-nine of the 96 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33246, Boron Region 3

Rincon Creek

LOE ID:	10452
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 15 of 55 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33246, Boron **Region 3**

Rincon Creek

LOE ID:	51455
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 14 of 41 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42842** **Region 3**

Rincon Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seventy-four of the 96 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-four of the 96 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42842, Chloride **Region 3**

Rincon Creek

LOE ID:	51456
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 33 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42842, Chloride **Region 3**

Rincon Creek

LOE ID:	10453
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 41 of 55 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40784	Region 3
Rincon Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for Non-Contact Recreation for Escherichia coli (E.Coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information' Three lines of evidence are available in the administrative record to assess this pollutant. Twenty one of 66 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 25 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Twenty one of 66 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40784, Escherichia coli (E. coli) **Region 3**

Rincon Creek

LOE ID:	12417
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40784, Escherichia coli (E. coli) Region 3

Rincon Creek

LOE ID:	12402
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 8 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40784, Escherichia coli (E. coli) Region 3

Rincon Creek

LOE ID:	51362
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to

	determine beneficial use support and results are as follows: 13 of 41 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40865**	**Region 3**
Rincon Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Thirty of 103 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 103 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty of the 103 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water

quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40865, Fecal Coliform **Region 3**

Rincon Creek

LOE ID:	51364
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40865, Fecal Coliform **Region 3**

Rincon Creek

LOE ID:	51361
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	41
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 13 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40865, Fecal Coliform **Region 3**

Rincon Creek

LOE ID:	12342
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a

	minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40865, Fecal Coliform **Region 3**

Rincon Creek

LOE ID:	12341
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 17 of 62 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40705	Region 3
Rincon Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Eighty-nine of the 95 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighty-nine of the 95 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40705, Sodium	Region 3
Rincon Creek	

LOE ID:	10484
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	51
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 51 of 55 samples exceed the criterion for Sodium.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40705, Sodium **Region 3**

Rincon Creek

LOE ID:	51179
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 38 of 40 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**33571**	**Region 3**
Rincon Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize sediment samples. Zero of the one sediment sample resulted in a significant toxic effect to one or more test organisms. Eight LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and four water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, six total samples are available to assess toxic effects in water samples. Four of the six water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the six sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. This exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33571, Toxicity — Region 3

Rincon Creek

LOE ID:	79679
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Although both of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count when compared to the control, the conductivity of these samplesÂ's was greater than 1500 uS/cm, the threshold at which a high salinity control sample should be used to calculate the test statistics. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects, these samples are not counted as exceedances.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315RIN - Rincon Creek upstream side of Highway 101 bridge.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33571, Toxicity — Region 3

Rincon Creek

LOE ID:	79681
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315RIN - Rincon Creek upstream side of Highway 101 bridge.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33571, Toxicity **Region 3**

Rincon Creek

LOE ID:	79680
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Two out of two samples displayed significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5% and is less than the evaluation threshold (both criteria are met). Both samples were tested using the 7-day Pimephales promelas test (SWAMP, 2004). Toxicity in the survival endpoint was detected in both these samples. Note the Specific Conductivity of these two sample is below the threshold for the Pimephales test organism and therefore cannot explain the toxicity of the sample.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315RIN - Rincon Creek at Bates Road, upstream side of Highway 101 bridge.
Temporal Representation:	Samples were collected December 3, 2001 and March 19, 2002.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33571, Toxicity **Region 3**

Rincon Creek

LOE ID:	57030
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Although both of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count when compared to the control, the conductivity of these samplesÂ's was greater than 1500 uS/cm, the threshold at which a high salinity control sample should be used to calculate the test statistics. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing.

	Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects, these samples are not counted as exceedances.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315RIN - Rincon Creek upstream side of Highway 101 bridge.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33571, Toxicity **Region 3**

Rincon Creek

LOE ID:	57029
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are

	counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315RIN - Rincon Creek upstream side of Highway 101 bridge.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33571, Toxicity **Region 3**

Rincon Creek

LOE ID:	24472
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples

	(collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33571, Toxicity **Region 3**

Rincon Creek

LOE ID:	24475
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101].
Temporal Representation:	Data was collected on two seperate sample dates, 12/3/2001 and 3/19/2002. SWAMP toxicity monitoring includes water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33571, Toxicity **Region 3**

Rincon Creek

LOE ID:	24476
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101].
Temporal Representation:	Data was collected on two seperate sample dates, 12/3/2001 and 3/19/2002. SWAMP toxicity monitoring includes water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33571, Toxicity **Region 3**

Rincon Creek

LOE ID:	24471
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33571, Toxicity **Region 3**

Rincon Creek

LOE ID:	1997
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two out of two samples displayed significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5% and is less than the evaluation threshold (both criteria are met). Both samples were tested using

	the 7-day Pimephales promelas test (SWAMP, 2004). Please note QA qualifier under Data Quality Assessment section below.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality conditions, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with the requirements for "experimental water" as described in Standard Methods for the Examination of Water and Wastewater, latest edition. As a minimum, compliance with this objective shall be evaluated with a 96-hour bioassay.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Both samples were collected from the same station, Rincon Creek at Bates Road.
Temporal Representation:	Samples were collected December 3, 2001 and March 19, 2002. Toxicity in the survival endpoint was detected in both these samples.
Environmental Conditions:	Rincon Creek is in the South Coast Hydrologic Unit.
QAPP Information:	SWAMP; QA qualifier indicated for the sample collected March 19, 2002. This is reported as minor deviations in water quality parameters.
QAPP Information Reference(s):	

DECISION ID	**40639**	**Region 3**
Rincon Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 102 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 103 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 102 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 103 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40639, Ammonia **Region 3**

Rincon Creek

LOE ID:	51382
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40639, Ammonia **Region 3**

Rincon Creek

LOE ID:	51342
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40639, Ammonia **Region 3**

Rincon Creek

LOE ID:	51180
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the

	criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40639, Ammonia **Region 3**

Rincon Creek

LOE ID:	10451
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-

	Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40639, Ammonia **Region 3**

Rincon Creek

LOE ID:	10450
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40639, Ammonia **Region 3**

Rincon Creek

LOE ID:	10449

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52476**	**Region 3**
Rincon Creek		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the three samples exceed the water quality objective.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs).

When scores from the two BMI indices (CSCI and Regional IBI) conflict in the overall assessment (as is the case of this water body), CSCI scores will be used over IBI scores. The CSCI is more appropriate to use as it is an advancement over the regional IBIs. Additionally, the CSCI provides multiple lines of evidence, incorporating measures of species composition and ecological traits into a single condition score.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 52476, Benthic Community Effects **Region 3**

Rincon Creek

LOE ID:	79407
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for this site are 0.545421864, 0.962111838, and 0.941063005. One sample is below the 0.79 threshold and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 315RINxxx-Rincon Creek at Bates Road.

Temporal Representation:	Surveys done on April 26, 2005; April 5, 2007; April 8, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52476, Benthic Community Effects **Region 3**

Rincon Creek

LOE ID:	57028
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two of the three of the IBI scores is 39 or below and are therefore are below the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in this waterbody resulting in the collection of more than one sample at the Rincon Creek station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the 2007 sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The three RWB samples included in this assessment have the following IBI scores: The 2005 sample IBI score was 40, the 2007 sample IBI score was 27 and the 2008 sample IBI score was 37.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315RINxxx-Rincon Creek at Bates Road.
Temporal Representation:	Surveys done on April 26, 2005; April 5, 2007; April 8, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID **40898** **Region 3**

Rincon Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 99 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 99 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40898, Chlorophyll-a **Region 3**

Rincon Creek

LOE ID:	10468
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40898, Chlorophyll-a **Region 3**

Rincon Creek

LOE ID:	10467
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface

	water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40898, Chlorophyll-a **Region 3**

Rincon Creek

LOE ID:	51181
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-

	Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40898, Chlorophyll-a **Region 3**

Rincon Creek

LOE ID:	51383
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	40881	Region 3
Rincon Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses, however, these samples will not be included in this decision because the laboratory method detection limit was above the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single sediment sample (pore water) is also not included in this decision because the laboratory method detection limit was above the guideline and the result was non-detect. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples are included in this decision because the laboratory method detection limit was above the guideline and the results were non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40881, Chlorpyrifos	Region 3
Rincon Creek	

LOE ID:	47718
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [Rincon Creek at Bates Road - 315RINxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40881, Chlorpyrifos **Region 3**

Rincon Creek

LOE ID:	16152
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40881, Chlorpyrifos **Region 3**

Rincon Creek

LOE ID:	16153
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson

	(2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40881, Chlorpyrifos **Region 3**

Rincon Creek

LOE ID:	47738
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [Rincon Creek at Bates Road - 315RINxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	40880	Region 3
Rincon Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment samples (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40880, Diazinon	Region 3
Rincon Creek	

LOE ID:	47657
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [Rincon Creek at Bates Road - 315RINxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40880, Diazinon **Region 3**

Rincon Creek

LOE ID:	16835
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40880, Diazinon **Region 3**

Rincon Creek

LOE ID:	47672
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [Rincon Creek at Bates Road - 315RINxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40880, Diazinon **Region 3**

Rincon Creek

LOE ID:	16834
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **49265** **Region 3**

Rincon Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 41 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 41 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49265, Nitrogen, Nitrite **Region 3**

Rincon Creek

LOE ID:	51474
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-

	Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40925 Region 3

Rincon Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. Five of the 108 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 108 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40925, Specific Conductivity Region 3

Rincon Creek

LOE ID:	12380
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40925, Specific Conductivity **Region 3**

Rincon Creek

LOE ID:	12358
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 1 of 62 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40925, Specific Conductivity **Region 3**

Rincon Creek

LOE ID:	51457
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 4 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40644** **Region 3**

Rincon Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 110 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 110 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40644, Temperature, water **Region 3**

Rincon Creek

LOE ID:	51341
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to

	determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40644, Temperature, water **Region 3**

Rincon Creek

LOE ID:	14141
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40644, Temperature, water **Region 3**

Rincon Creek

LOE ID:	14104
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40690 Region 3

Rincon Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 108 samples exceed the water quality objectives for Agriculture, Cold and Warm Freshwater Habitats, and one of the 108 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 108 samples exceed the water quality objectives for Agriculture, Cold and Warm Freshwater Habitats, and one of the 108 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40690, pH — Region 3

Rincon Creek

LOE ID:	12360
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	12361
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 1 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	12362
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 1 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	12398
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	12399
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation: Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID: 12400

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation: Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID: 12381

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	12382
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	12378
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 1 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	12379
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	12401
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	12359
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	51475
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	51325
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	51365
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	51363
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	51403
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40690, pH **Region 3**

Rincon Creek

LOE ID:	51346
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40809**	**Region 3**
Rincon Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 103 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. Thirty-three of the 41 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 41 nitrate/nitrite samples exceed the water quality objectives for Agricultural Supply and Municipal and Domestic Supply. Thirty-six of the 41 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing for Cold and Warm Freshwater Habitat. The following is a summary of the supporting evidence: 1) This water body segment is on the 303(d) List due to low dissolved oxygen. Dissolved oxygen for this water body ranged from 3.65 mg/L to 14.17 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L, and at times exceeding the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody at times exceeds the upper

dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentration ranged up to 54 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 3.90 mg/L to 5.25 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 87 mg/m2 to 161 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2, but not the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-three of the 41 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Thirty-six of the 41 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. There is sufficient supporting evidence of eutrophication.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	51345
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	51182
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 33 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	51472
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	51473
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	51384
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 33 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	51385
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 36 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	51322
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 36 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	51344
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	10469
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40809, Nitrate **Region 3**

Rincon Creek

LOE ID:	10470
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed

	in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40557**	**Region 3**
Rincon Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Nineteen of the 111 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and two of the 111 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of the 111 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved — Region 3

Rincon Creek

LOE ID:	14121
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved — Region 3

Rincon Creek

LOE ID:	14119
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID:	14082
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	63
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 1 of 63 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID:	14081
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	63
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 6 of 63 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID:	14084
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 13 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID:	14083
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Rincon Creek to determine beneficial use support and results are as follows: 13 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID:	14120
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]

Temporal Representation: Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID: 14118

Pollutant: Oxygen, Dissolved

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 7

Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Rincon Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]

Temporal Representation: Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID: 51401

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID:	51324
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 20 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality

	conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID:	51323
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 11 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40557, Oxygen, Dissolved **Region 3**

Rincon Creek

LOE ID:	51402
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Rincon Creek to determine beneficial use support and results are as follows: 20 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40513**	**Region 3**
Rincon Creek		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40513, Anthracene **Region 3**

Rincon Creek

LOE ID:	14798
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40513, Anthracene **Region 3**

Rincon Creek

LOE ID:	15619
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40479** **Region 3**

Rincon Creek

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40479, Arsenic **Region 3**

Rincon Creek

LOE ID:	15689
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40479, Arsenic **Region 3**

Rincon Creek

LOE ID:	15690
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40863** **Region 3**

Rincon Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40863, Benzo(a)anthracene **Region 3**

Rincon Creek

LOE ID:	15743
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40863, Benzo(a)anthracene **Region 3**

Rincon Creek

LOE ID:	15757
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40819** **Region 3**

Rincon Creek

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40819, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Rincon Creek

LOE ID:	15373
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40819, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Rincon Creek

LOE ID:	15374
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40820 **Region 3**

Rincon Creek

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40820, Cadmium — Region 3

Rincon Creek

LOE ID:	15487
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40820, Cadmium **Region 3**

Rincon Creek

LOE ID:	15474
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	40821	Region 3
Rincon Creek		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40821, Chromium	**Region 3**
Rincon Creek	

LOE ID:	15929
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40821, Chromium **Region 3**

Rincon Creek

LOE ID:	15928
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40833** **Region 3**

Rincon Creek

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40833, Chrysene (C1-C4) **Region 3**

Rincon Creek

LOE ID:	16013
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40833, Chrysene (C1-C4) **Region 3**

Rincon Creek

LOE ID:	16014
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40662 Region 3

Rincon Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40662, Copper Region 3

Rincon Creek

LOE ID:	16096
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40662, Copper **Region 3**

Rincon Creek

LOE ID:	16097
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40851 Region 3

Rincon Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40851, Dieldrin Region 3

Rincon Creek

LOE ID:	16760
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40851, Dieldrin **Region 3**

Rincon Creek

LOE ID:	16774
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40852** **Region 3**

Rincon Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40852, Endrin **Region 3**

Rincon Creek

LOE ID:	16370
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40852, Endrin **Region 3**

Rincon Creek

LOE ID:	16371
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1

	samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40808**	**Region 3**
Rincon Creek		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40808, Fluoranthene — Region 3

Rincon Creek

LOE ID:	16456
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40808, Fluoranthene — Region 3

Rincon Creek

LOE ID:	16455
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40659**	**Region 3**
Rincon Creek		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40659, Fluorene **Region 3**

Rincon Creek

LOE ID:	16572
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40659, Fluorene **Region 3**

Rincon Creek

LOE ID:	16585
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40504**	**Region 3**
Rincon Creek		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40504, Lead **Region 3**

Rincon Creek

LOE ID:	17167
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40504, Lead **Region 3**

Rincon Creek

LOE ID:	17168

Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40505**	**Region 3**
Rincon Creek		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40505, Mercury **Region 3**

Rincon Creek

LOE ID:	17253
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40505, Mercury **Region 3**

Rincon Creek

LOE ID:	17252
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40616** **Region 3**

Rincon Creek

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with

sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40616, Naphthalene **Region 3**

Rincon Creek

LOE ID:	17319
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40616, Naphthalene **Region 3**

Rincon Creek

LOE ID:	17318
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40589** **Region 3**

Rincon Creek

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40589, Nickel **Region 3**

Rincon Creek

LOE ID:	16887
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40589, Nickel **Region 3**

Rincon Creek

LOE ID:	16900
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40590** **Region 3**

Rincon Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40590, Phenanthrene **Region 3**

Rincon Creek

LOE ID:	16987
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40590, Phenanthrene **Region 3**

Rincon Creek

LOE ID:	16986
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41295	Region 3
Rincon Creek		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41295, Pyrene	**Region 3**
Rincon Creek	

LOE ID:	17105
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41295, Pyrene **Region 3**

Rincon Creek

LOE ID:	17104
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40689** **Region 3**

Rincon Creek

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40689, Zinc **Region 3**

Rincon Creek

LOE ID:	17737
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40689, Zinc **Region 3**

Rincon Creek

LOE ID:	17736
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Rincon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Rincon Creek was collected at 1 monitoring site [315RIN-

	Rincon Creek at Bates Road, u/s Highway 101]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arroyo Paredon**
Water Body ID: **CAR3153401019990222143223**
Water Body Type: **River & Stream**

DECISION ID **33569** **Region 3**
Arroyo Paredon

Pollutant: **Boron**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Twenty-seven of the 44 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-seven of the 44 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33569, Boron **Region 3**
Arroyo Paredon

LOE ID: 49139

Pollutant: Boron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Agricultural Supply

Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33569, Boron **Region 3**

Arroyo Paredon

LOE ID:	9790
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 9 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33569, Boron **Region 3**

Arroyo Paredon

LOE ID:	1995
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine out of 16 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (SWAMP, 2004; CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Samples were collected from January 2001 through March 2002.
Environmental Conditions:	The water body is located in the South Coast hydrologic unit, South Coast hydrologic area, and Carpinteria hydrologic subarea. The site location is Arroyo Paredon Creek at Via Real (315APC).
QAPP Information:	CCAMP, SWAMP QAPP.
QAPP Information Reference(s):	

DECISION ID	36968	Region 3
Arroyo Paredon		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 28 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-two of the 28 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36968, Chloride	**Region 3**
Arroyo Paredon	

LOE ID:	9791
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 11 of 16 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36968, Chloride **Region 3**

Arroyo Paredon

LOE ID:	49149
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]

Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36346 Region 3

Arroyo Paredon

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 27 samples exceeded the water quality objective for non-contact recreation but 15 of 27 samples exceeded the water quality objective for contact recreation (i.e. swimming). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of 27 samples exceeded the water quality objective for contact recreation and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36346, Fecal Coliform Region 3

Arroyo Paredon

LOE ID:	49190
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36346, Fecal Coliform **Region 3**

Arroyo Paredon

LOE ID:	49178
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period

	exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36346, Fecal Coliform **Region 3**

Arroyo Paredon

LOE ID:	11422
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36346, Fecal Coliform **Region 3**

Arroyo Paredon

LOE ID:	11421
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41661** **Region 3**

Arroyo Paredon

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-six of the 28 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-six of the 28 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41661, Sodium **Region 3**

Arroyo Paredon

LOE ID:	49164
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41661, Sodium **Region 3**

Arroyo Paredon

LOE ID:	9807
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 15 of 16 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41441	Region 3
Arroyo Paredon		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Arroyo Paredon Diazinon TMDL
TMDL Project Code:	892
Date TMDL Approved by USEPA:	06/13/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 3 samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses. The single sample did not exceed the USEPA drinking water health advisory. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. For the municipal beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 3 samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Arroyo Paredon Diazinon and Additive Toxicity TMDL has been approved by the USEPA on June 13, 2013.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41441, Diazinon — Region 3

Arroyo Paredon

LOE ID:	53173
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41441, Diazinon — Region 3

Arroyo Paredon

LOE ID:	53174
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41441, Diazinon **Region 3**

Arroyo Paredon

LOE ID:	47716
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon Creek at Via Real - 315APCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41441, Diazinon **Region 3**

Arroyo Paredon

LOE ID:	16749
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **33570** **Region 3**

Arroyo Paredon

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Arroyo Paredon Nitrate TMDL
TMDL Project Code:	1062
Date TMDL Approved by USEPA:	02/13/2014
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 38 nitrate samples exceed the water quality objectives for Agricultural Supply. Twenty-five of 38 nitrate samples 11 of 51 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply use. Twelve of the 22 nitrate samples and 15 of 39 nitrate/nitrite samples exceed the (Central Coast Region Technical Report, 2010) for Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 1.48 mg/L to 16.96 mg/L, exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). (However, the frequency of exceedance is low)
2) Water column chlorophyll a concentration averaged 19.05 ug/L and ranged up to 60.1 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body to be 4.12 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 86 g/m2 ash-free dry weight (AFDW). This exceeds the Warm Freshwater Habitat screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic chlorophyll a concentration of 215 mg/m2. This exceeds the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

It should be noted that there is no evidence of impairment at the upstream monitoring location, at Foothill Road. All of the exceedances described above are from the monitoring station in the lower watershed, at Via Real.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of the 38 nitrate samples exceed the water quality objectives for Agricultural Supply. Twenty-five of 38 nitrate samples 11 of 51 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply use. Each of these exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Twelve of the 22 nitrate samples and 15 of 39 nitrate/nitrite samples exceed the (Central Coast Region Technical Report, 2010) for Warm Freshwater Habitat and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.
5. The Arroyo Paredon Nitrate TMDL has been approved by USEPA on 02/13/2014.
6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	49204
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	15299

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	49175
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	49205
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	49151
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	49176
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	48032
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 2/13/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	48033
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 3 of 27 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF

	- Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 2/13/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	48272
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 12/16/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	48273

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 12/16/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	48274
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 12/16/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	9793
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 7 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33570, Nitrate **Region 3**

Arroyo Paredon

LOE ID:	9806
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 14 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	33218	Region 3
Arroyo Paredon		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Arroyo Paredon Diazinon TMDL
TMDL Project Code:	892
Date TMDL Approved by USEPA:	06/13/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Three LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and four additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in sediment samples. Two of the five sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Seven LOEs summarize water samples. Five water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and ten additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fifteen total samples are available to assess toxic effects in water samples. Eight of the fifteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the five sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. Eight of the fifteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Arroyo Paredon Toxicity and Diazinon TMDL has been approved by the USEPA on June13, 2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water

quality standards for the pollutant are being exceeded. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	1994
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two out of two samples displayed significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria met). Both toxic samples were tested using the 7-day Ceriodaphnia dubia test (SWAMP, 2004). Please note QA qualifier under Data Quality Assessment section below.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Basin Plan: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective shall be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board. Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality conditions, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with the requirements for "experimental water" as described in Standard Methods for the Examination of Water and Wastewater, latest edition.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Both samples were collected from the same station (Arroyo Paredon) Paredon Creek at Via Real.
Temporal Representation:	Samples were collected December 3, 2001 and March 19, 2002. Toxicity in the survival endpoint was detected in both these samples.
Environmental Conditions:	Arroyo Paredon is in the South Coast Hydrologic Unit.
QAPP Information:	SWAMP; QA qualifier indicated for the sample collected March 19, 2002 reported "minor deviations in water quality parameters".
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	23590

Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	23597
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Via Real]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	23596
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	23595
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Via Real]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	23589
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Via Real]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	23592
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Via Real]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	53246
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The sample was collected at station 315APCxxx also called 315APC.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	53245
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to evaluate water toxicity. Three of the eight samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia (9/23/08, 1/21/10, 3/25/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. A statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 315APF Arroyo Paredon.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following the program QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33218, Toxicity **Region 3**

Arroyo Paredon

LOE ID:	53247
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. Samples collected on 4/9/2007 and 4/15/2009 exhibited significant toxicity to Hyalella azteca survival.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. A statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 315APF Arroyo Paredon.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following their QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**36239**	**Region 3**
Arroyo Paredon		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. This decision replaces the two previously approved decisions for each of the pollutants unionized ammonia (Decision 22724) and total ammonia (Decision 36239) and contains all of the LOEs from those decisions in addition to new LOEs. Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data. One of 56 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data. None of the 70 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 56 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 70 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36239, Ammonia **Region 3**

Arroyo Paredon

LOE ID:	14460
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/25/2006-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36239, Ammonia **Region 3**

Arroyo Paredon

LOE ID:	9777
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36239, Ammonia **Region 3**

Arroyo Paredon

LOE ID:	9778
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36239, Ammonia **Region 3**

Arroyo Paredon

LOE ID:	49165
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36239, Ammonia **Region 3**

Arroyo Paredon

LOE ID:	49193
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-11/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36239, Ammonia **Region 3**

Arroyo Paredon

LOE ID:	48246
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36239, Ammonia **Region 3**

Arroyo Paredon

LOE ID:	48247
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 4/9/2007-3/29/2010.
Environmental Conditions:	One sample result was reported as non-detect and the detection limit was above the guideline. Because this result is considered estimated, this sample was not used in analysis. The sample is from 8/14/08.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36239, Ammonia **Region 3**

Arroyo Paredon

LOE ID:	15298
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health

	Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	46649	Region 3
Arroyo Paredon		

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One lines of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46649, Azinphos-methyl (Guthion)	Region 3

Arroyo Paredon

LOE ID:	53165
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **41405** **Region 3**

Arroyo Paredon

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 64 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 64 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41405, Chlorophyll-a **Region 3**

Arroyo Paredon

LOE ID:	14461
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]

Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41405, Chlorophyll-a **Region 3**

Arroyo Paredon

LOE ID:	9792
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41405, Chlorophyll-a **Region 3**

Arroyo Paredon

LOE ID:	48259
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41405, Chlorophyll-a **Region 3**

Arroyo Paredon

LOE ID:	49194
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41451**	**Region 3**
Arroyo Paredon		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. One water sample will not be used in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.The single sample did not exceed the USEPA drinking water health advisory. The single sediment sample (pore water) exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Each sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of two samples the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). The single sediment sample (pore water) exceeded the evaluation guideline; however, pore water results will not be the sole basis for any decision. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41451, Chlorpyrifos **Region 3**

Arroyo Paredon

LOE ID:	48260
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41451, Chlorpyrifos **Region 3**

Arroyo Paredon

LOE ID:	47698
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water

	quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon Creek at Via Real - 315APCxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41451, Chlorpyrifos **Region 3**

Arroyo Paredon

LOE ID:	16325
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41451, Chlorpyrifos **Region 3**

Arroyo Paredon

LOE ID:	53167
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46650** **Region 3**

Arroyo Paredon

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample

did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46650, Demeton **Region 3**
Arroyo Paredon

LOE ID:	53172
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46651** **Region 3**
Arroyo Paredon

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46651, Dichlorvos **Region 3**

Arroyo Paredon

LOE ID:	53175
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

	Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46652 Region 3

Arroyo Paredon

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46652, Dimethoate Region 3

Arroyo Paredon

LOE ID:	53177
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46652, Dimethoate **Region 3**

Arroyo Paredon

LOE ID:	53176
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	46653	Region 3
Arroyo Paredon		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46653, Disulfoton	**Region 3**
Arroyo Paredon	

LOE ID:	53184
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46654 Region 3

Arroyo Paredon

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46654, Ethoprop Region 3

Arroyo Paredon

LOE ID:	53185
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**46655**	**Region 3**
Arroyo Paredon		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46655, Malathion **Region 3**

Arroyo Paredon

LOE ID:	53187
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46655, Malathion **Region 3**

Arroyo Paredon

LOE ID:	53186
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**46656**	**Region 3**
Arroyo Paredon		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46656, Methidathion — Region 3

Arroyo Paredon

LOE ID:	53188
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46656, Methidathion — Region 3

Arroyo Paredon

LOE ID:	53194
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**46657**	**Region 3**
Arroyo Paredon		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46657, Methyl Parathion **Region 3**

Arroyo Paredon

LOE ID:	53196
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46657, Methyl Parathion **Region 3**

Arroyo Paredon

LOE ID:	53195
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**46662**	**Region 3**
Arroyo Paredon		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 12 samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46662, Nitrogen, Nitrite **Region 3**

Arroyo Paredon

LOE ID:	49162
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37116** **Region 3**

Arroyo Paredon

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Zero of the 68 samples exceed the objective for Warm Freshwater Habitat and 1 of 37 samples exceed the water quality objective for protection of Fish Spawning Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Warm Freshwater and Spawning Habitats and the dissolved oxygen levels appear to be supporting those beneficial uses. Therefore, the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 68 samples exceed the objective for Warm Freshwater Habitat this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	48036
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 6 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF

	- Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	49192
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	49207
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	49206
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	48034
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	14463
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	13264
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	13265
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	13282
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Paredon to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	13268

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	14462
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Via Real]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37116, Oxygen, Dissolved **Region 3**

Arroyo Paredon

LOE ID:	48035
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46658 Region 3

Arroyo Paredon

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46658, Parathion Region 3

Arroyo Paredon

LOE ID:	53208
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**46659**	**Region 3**
Arroyo Paredon		

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46659, Phorate **Region 3**

Arroyo Paredon

LOE ID:	53230
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46659, Phorate **Region 3**

Arroyo Paredon

LOE ID:	53221
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46660 Region 3

Arroyo Paredon

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46660, Phosmet Region 3

Arroyo Paredon

LOE ID:	53231
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46660, Phosmet **Region 3**

Arroyo Paredon

LOE ID:	53232
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [Arroyo Paredon - 315APF]
Temporal Representation:	Data was collected on a single day 8/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 36891 Region 3
Arroyo Paredon

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two of 56 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 56 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36891, Specific Conductivity Region 3
Arroyo Paredon

LOE ID:	11423
Pollutant:	Electrical Conductivity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36891, Specific Conductivity **Region 3**

Arroyo Paredon

LOE ID:	48261
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Conductivity(Us).

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36891, Specific Conductivity **Region 3**

Arroyo Paredon

LOE ID:	49150
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36891, Specific Conductivity **Region 3**

Arroyo Paredon

LOE ID:	11442
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41662 Region 3

Arroyo Paredon

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Nine of the 70 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 70 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41662, Turbidity — Region 3

Arroyo Paredon

LOE ID:	49140
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).

Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41662, Turbidity **Region 3**

Arroyo Paredon

LOE ID:	48183
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 28 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41662, Turbidity **Region 3**

Arroyo Paredon

LOE ID:	14234

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Via Real]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41662, Turbidity **Region 3**

Arroyo Paredon

LOE ID:	13267
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 4 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41662, Turbidity **Region 3**

Arroyo Paredon

LOE ID:	13284
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36254 Region 3

Arroyo Paredon

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Four of the 68 samples exceed the water quality objectives for Agricultural Supply, Municipal and Domestic Supply, and Recreation uses. One of the 68 samples exceed the water quality objective for Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 68 samples exceed the water quality objectives for Agricultural Supply, Municipal and Domestic Supply, and Recreation uses. One of the 68 samples exceed the water quality objective for Warm Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36254, pH Region 3

Arroyo Paredon

LOE ID:	11424
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	14480
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Via Real]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	11439
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	11440
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	11441
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	11457
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Paredon to determine beneficial use support and results are as follows:

	0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	11458
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	11459
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	11460
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	11461
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	49163
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	49177
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	49180
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	49191
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	49208
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	48178
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	48179
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	48180
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	48181
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	48182
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	14476
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	14477
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Via Real]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	14478
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver

	Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Via Real]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	14479
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Paredon to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APF - Arroyo Paredon at Foothill]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36254, pH **Region 3**

Arroyo Paredon

LOE ID:	11438
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/19/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 46661 Region 3

Arroyo Paredon

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Seven of the 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for Water Contact Recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 12 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 46661, Escherichia coli (E. coli) — Region 3

Arroyo Paredon

LOE ID:	49179
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Paredon to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41399** **Region 3**

Arroyo Paredon

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline and this does not exceed the allowable frequency in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41399, Anthracene **Region 3**

Arroyo Paredon

LOE ID:	15766
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37082**	**Region 3**
Arroyo Paredon		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The sample did

not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37082, Arsenic **Region 3**

Arroyo Paredon

LOE ID:	15837
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41537 Region 3

Arroyo Paredon

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41537, Benzo(a)anthracene Region 3

Arroyo Paredon

LOE ID:	15697
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41586**	**Region 3**
Arroyo Paredon		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41586, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Arroyo Paredon

LOE ID:	15518
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36277	Region 3
Arroyo Paredon		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36277, Cadmium	**Region 3**
Arroyo Paredon	

LOE ID:	15379
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37010**	**Region 3**
Arroyo Paredon		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37010, Chromium **Region 3**

Arroyo Paredon

LOE ID:	16073
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41549** **Region 3**

Arroyo Paredon

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41549, Chrysene (C1-C4) **Region 3**

Arroyo Paredon

LOE ID:	15906
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36774** **Region 3**

Arroyo Paredon

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36774, Copper **Region 3**

Arroyo Paredon

LOE ID:	15975
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41590**	**Region 3**
Arroyo Paredon		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41590, Dieldrin **Region 3**

Arroyo Paredon

LOE ID:	16713
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41567 Region 3
Arroyo Paredon

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41567, Endrin Region 3
Arroyo Paredon

LOE ID:	16515
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41400**	**Region 3**
Arroyo Paredon		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41400, Fluoranthene **Region 3**

Arroyo Paredon

LOE ID:	16859
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41401	Region 3
Arroyo Paredon		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41401, Fluorene	**Region 3**
Arroyo Paredon	

LOE ID:	16430
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluorene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37025**	**Region 3**
Arroyo Paredon		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The one sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37025, Lead **Region 3**

Arroyo Paredon

LOE ID:	17312
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36362** **Region 3**

Arroyo Paredon

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36362, Mercury **Region 3**

Arroyo Paredon

LOE ID:	17126
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41402 Region 3

Arroyo Paredon

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41402, Naphthalene Region 3

Arroyo Paredon

LOE ID:	17227
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41442**	**Region 3**
Arroyo Paredon		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41442, Nickel **Region 3**

Arroyo Paredon

LOE ID:	17032
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41389 Region 3

Arroyo Paredon

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41389, Phenanthrene Region 3

Arroyo Paredon

LOE ID:	16877
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41390**	**Region 3**
Arroyo Paredon		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41390, Pyrene **Region 3**

Arroyo Paredon

LOE ID:	16996
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36314	Region 3
Arroyo Paredon		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36314, Zinc	**Region 3**
Arroyo Paredon	

LOE ID:	17903
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Paredon to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Paredon was collected at 1 monitoring site [315APC-Arroyo Paredon Creek at Via Real]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Mission Creek (Santa Barbara County)**
Water Body ID: **CAR3153201119980826110307**
Water Body Type: **River & Stream**

DECISION ID **42180** **Region 3**
Mission Creek (Santa Barbara County)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for E. coli non-contact recreation is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'.

Four lines of evidence are available in the administrative record to assess this pollutant. Sixty one of 78 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 2 of 25 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty one of 78 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42180, Escherichia coli (E. coli) **Region 3**
Mission Creek (Santa Barbara County)

LOE ID: 12470

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42180, Escherichia coli (E. coli) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12469
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	24
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 24 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42180, Escherichia coli (E. coli) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	50591
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	36
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 36 of 41 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42180, Escherichia coli (E. coli) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50592
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41538 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of

Conclusion:	the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Eighty two of 130 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 19 of 130 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighty two of 130 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41538, Fecal Coliform **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50596
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41538, Fecal Coliform **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50590
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41538, Fecal Coliform **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50878
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	28
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 28 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41538, Fecal Coliform **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50595
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41538, Fecal Coliform **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	3962
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41538, Fecal Coliform **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12188

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41538, Fecal Coliform **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12189
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41538, Fecal Coliform **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12436
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 13 of 62 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41538, Fecal Coliform **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12435
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	50
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 50 of 62 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42055	Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Thirty-three of the 142 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 10 of the 142 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-three of the 142 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13922
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 31 of 66 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13921
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 31 of 66 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13920
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 8 of 66 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13919
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 23 of 66 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13979
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are

	as follows: 0 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13941
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13942
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13963
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13962
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for

	Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13961
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]

Temporal Representation: Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID: 13943

Pollutant: Dissolved oxygen saturation

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 7

Number of Exceedances: 4

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Oxygen, Saturation.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]

Temporal Representation: Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13959
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50815
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek

	(Santa Barbara County) to determine beneficial use support and results are as follows: 20 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50612
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50814
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50816
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50813
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 7 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50611
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 20 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50610
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42055, Oxygen, Dissolved **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50609
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1

	monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41895 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Thirteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Four LOEs summarize sediment samples. Zero of the two sediment samples resulted in a significant toxic effect to one or more test organisms. Nine LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fifteen total samples are available to assess toxic effects in water samples. Two of the fifteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 15 water samples resulted in a significant toxic effect to one or more test organisms and therefore also exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41895, Toxicity Region 3

Mission Creek (Santa Barbara County)

LOE ID:	79221
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315MISxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	79222
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315MIS - Mission Creek at Montecito St.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	79223
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. None of the nine samples exhibited significant toxicity. The toxicity tests for the samples included survival of Pimephales promelas.
Data Reference:	Data for toxicity in Mission Creek (Santa Barbara County), Mar 2007-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected at sites MC Cota, MC Monteci and MC Miss Cy.
Temporal Representation: The samples were collected from May 2007 to October 2009.
Environmental Conditions:
QAPP Information: The data was collected for the Preliminary Desisgn for the Mission Creek Lagoon and Laguna Channel Restoration Project, City of Santa Barbara 2011. There is no QAPP or QA documentation for this data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID: 79224

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Two samples were collected to evaluate water toxicity. Both of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference: Coastal Confluences 2008 2009

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference: Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation: The samples were collected at station 315MISxxx.
Temporal Representation: The samples were collected in August 2008 and January 2009.
Environmental Conditions:
QAPP Information: The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55176
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315MISxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55181
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. None of the nine samples exhibited significant toxicity. The toxicity tests for the samples included survival of Pimephales

	promelas.
Data Reference:	Data for toxicity in Mission Creek (Santa Barbara County), Mar 2007-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at sites MC Cota, MC Monteci and MC Miss Cy.
Temporal Representation:	The samples were collected from May 2007 to October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Preliminary Desisgn for the Mission Creek Lagoon and Laguna Channel Restoration Project, City of Santa Barbara 2011. There is no QAPP or QA documentation for this data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55175
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064

SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The samples were collected at station 315MIS - Mission Creek at Montecito St.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55174
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Both of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315MISxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	3963

Pollutant:	Unknown Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	23881
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	24024
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIU-Mission Creek at Cathedral Oaks Road, 315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	24011
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41895, Toxicity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	24023
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIU-Mission Creek at Cathedral Oaks Road, 315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42167 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which zero of the 128 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 131 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 128 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 131 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42167, Ammonia — Region 3

Mission Creek (Santa Barbara County)

LOE ID:	10634
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10617
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10616
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10615
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10649
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are

	as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10635
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50837
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50602
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50853
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50777
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50778
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42167, Ammonia **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50601
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41492 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d)

List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41492, Anthracene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55253
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41492, Anthracene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55259
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41492, Anthracene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15817
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41492, Anthracene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15816
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41493 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 41493, Arsenic Region 3

Mission Creek (Santa Barbara County)

LOE ID:	15614
Pollutant:	Arsenic

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41493, Arsenic **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15627
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41493, Arsenic **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55261
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41493, Arsenic **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55260
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48484 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this indicator. One of the two samples exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the two samples was below the California Stream Condition Index (CSCI) score of 0.79 which indicates poor water quality for this area. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs). When scores from the two BMI indices (CSCI and Regional IBI) conflict in the overall assessment, CSCI scores will be used over IBI scores. The CSCI is more appropriate to use as it is an advancement over the regional IBIs. Additionally, the CSCI provides multiple lines of evidence, incorporating measures of species composition and ecological traits into a single condition score.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 48484, Benthic Community Effects **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55262
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores in this water body were 39 or lower and therefore are below the impairment threshold of the Southern California IBI.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a

	habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	Surveys done at the following station: 315MISxxx-Mission Creek at Montecito Street.
Temporal Representation:	Surveys done on April 26, 2005 and April 8, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48484, Benthic Community Effects **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55263
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was above 40 and therefore is not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315MIUxxx-Mission Creek at Foothill Road
Temporal Representation:	Surveys done on April 28, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48484, Benthic Community Effects **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	79405
Pollutant:	Benthic-Macroinvertebrate Bioassessments

LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is 0.521505739. This site is below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 315MISxxx
Temporal Representation:	Surveys done on Apr 26 2005.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 41233 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16

samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 41233, Benzo(a)anthracene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55162
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41233, Benzo(a)anthracene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55161
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41233, Benzo(a)anthracene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15496
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41233, Benzo(a)anthracene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15495
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41541 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 41541, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15580
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41541, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15581
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41541, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55164
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for

	sediment-dwelling organisms) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41541, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55163
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48488 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48488, Bifenthrin — Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55170
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48488, Bifenthrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55169
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g

	and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41234 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 41234, Cadmium Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55171
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41234, Cadmium **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55172
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41234, Cadmium **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15429
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41234, Cadmium **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15430
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48485 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample exceeded the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48485, Chlordane **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55177
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48485, Chlordane **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55178
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42228 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 127 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 127 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42228, Chlorophyll-a Region 3

Mission Creek (Santa Barbara County)

LOE ID:	50779
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42228, Chlorophyll-a **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50780
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42228, Chlorophyll-a **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50604
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42228, Chlorophyll-a **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50603
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]

Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42228, Chlorophyll-a **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10618
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42228, Chlorophyll-a **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10651
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42228, Chlorophyll-a **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10632
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42228, Chlorophyll-a **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10650
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41412 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. One sample exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Four samples were taken however; the other three samples should not be included in the sample count because the laboratory method detection limit and reporting limit were greater than the evaluation guideline. Therefore we do not have confidence to state that the three samples are actually non-detects. LOE #16123 and 16136 should be changed to state that the single sample exceeded the evaluation guideline. The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). The single sediment sample (pore water) will not be included in the sample count because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41412, Chlorpyrifos **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16136
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41412, Chlorpyrifos **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16123
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41412, Chlorpyrifos **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	47647
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41412, Chlorpyrifos **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	47648
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41412, Chlorpyrifos **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55179
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41412, Chlorpyrifos **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55180
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42157 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Note pollutant name change from 'Chromium (Total)' to 'Chromium'. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42157, Chromium **Region 3**
Mission Creek (Santa Barbara County)

LOE ID:	55186
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42157, Chromium **Region 3**
Mission Creek (Santa Barbara County)

LOE ID:	55185
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42157, Chromium **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15900
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42157, Chromium **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15887
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1

	monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42213 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42213, Chrysene (C1-C4) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15968
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42213, Chrysene (C1-C4) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	15969
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42213, Chrysene (C1-C4) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55188
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42213, Chrysene (C1-C4) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55187
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42214 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the

Conclusion:	Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42214, Copper Mission Creek (Santa Barbara County) **Region 3**

LOE ID:	55190
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42214, Copper **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55189
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42214, Copper **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16794

Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42214, Copper **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16781
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48489 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48489, Cyfluthrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55192
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48489, Cyfluthrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55191
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48490 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support

rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48490, Cyhalothrin, Lambda **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55199
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48490, Cyhalothrin, Lambda **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55193
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48491 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48491, Cypermethrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55201
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48491, Cypermethrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55200
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1

	monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48481 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48481, DDD (Dichlorodiphenyldichloroethane) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55210
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48481, DDD (Dichlorodiphenyldichloroethane) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55202
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48482 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48482, DDE (Dichlorodiphenyldichloroethylene) Region 3
Mission Creek (Santa Barbara County)

LOE ID:	55212
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48482, DDE (Dichlorodiphenyldichloroethylene) Region 3
Mission Creek (Santa Barbara County)

LOE ID:	55211
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48483 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48483, DDT (Dichlorodiphenyltrichloroethane) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55213
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48483, DDT (Dichlorodiphenyltrichloroethane) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55173
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48483, DDT (Dichlorodiphenyltrichloroethane) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55168
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48483, DDT (Dichlorodiphenyltrichloroethane) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55220
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48492 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48492, Deltamethrin Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55221
Pollutant:	Deltamethrin

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48492, Deltamethrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55222
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42243 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. One of the four samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The decision for the 2010 303(d) list used 0.16 ug/L (Siepmann and Finlayson, 2000) as the evaluation guideline and resulted in zero out of four samples exceeding this guideline. The evaluation guideline of 0.1 ug/L is now being used resulted in one of the four samples exceeding the evaluation guideline. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One out of four samples exceeded the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42243, Diazinon **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55223
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42243, Diazinon **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55227
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42243, Diazinon **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	47663
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42243, Diazinon **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16816
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42243, Diazinon **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	47679
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]

Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42243, Diazinon **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16817
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42218 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant: Dieldrin

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42218, Dieldrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16731
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42218, Dieldrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16493
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42218, Dieldrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55229
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42218, Dieldrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55228
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42229 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42229, Endrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55231
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42229, Endrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55230
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42229, Endrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16564
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42229, Endrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16563
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48493 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48493, Esfenvalerate/Fenvalerate Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55233
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48493, Esfenvalerate/Fenvalerate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55232
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48494 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Ding et al., 2011) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48494, Fenpropathrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55235
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48494, Fenpropathrin **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55234
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42230 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the

Conclusion:	Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42230, Fluoranthene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55237
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42230, Fluoranthene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55236
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42230, Fluoranthene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16396

Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42230, Fluoranthene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16409
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42233 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42233, Fluorene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17277
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42233, Fluorene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17290
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42233, Fluorene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55238
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42233, Fluorene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55239
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42234	Region 3
Mission Creek (Santa Barbara County)		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42234, Lead	Region 3
Mission Creek (Santa Barbara County)	

LOE ID:	55240
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42234, Lead **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55241
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42234, Lead **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17375
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42234, Lead **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17374
Pollutant:	Lead

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48495 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al., 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances

is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48495, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55243
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48495, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55242
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42091 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42091, Mercury **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55244
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and

	Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42091, Mercury **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55245
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42091, Mercury **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17176
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42091, Mercury **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17177
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48496 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Ding et al., 2011) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48496, Methyl Parathion **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55247
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48496, Methyl Parathion **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55246
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42092 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to

result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42092, Naphthalene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55249
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42092, Naphthalene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55248
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42092, Naphthalene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16539
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42092, Naphthalene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16540
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42217 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is

insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42217, Nickel **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17081
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42217, Nickel **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17080
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42217, Nickel **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55250
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and

	Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42217, Nickel **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55251
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41471	Region 3
Mission Creek (Santa Barbara County)		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 131 nitrate samples and zero of the 53 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Four of the 53 nitrate samples and six of the 53 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. Although the following evidence documents a low dissolved oxygen condition in this water segment, it does not support the conclusion that nitrate contributes to or causes a bio-stimulatory effect. Furthermore, more recent data shows lower nitrate concentrations (below the evaluation guideline). 1) Dissolved oxygen for this water body ranged from 3.39 mg/L to 14.30 mg/L, frequently exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and at times exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). This waterbody is listed as impaired for low dissolved oxygen. 2) Floating algal mats ranged up to 90 % cover, but rarely exceeded the screening threshold of 50% (R3 NNE Technical Report, 2010) and typically are in the 1-10% range of cover. 3) Water column chlorophyll a concentration ranged up to 31.1 ug /L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 4) Nitrate concentrations for this water segment ranged from 0.01 to 2.30 mg/L as N. The most recent three years of data (which are not included in this assassment0 show that only 1 of the 36 samples exceeded 1.0 mg/L. 5) the NNE model does not predict problematic levels of benthic algal biomass or oxygen deficit in this water segment based on the nitrate data. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 131 nitrate samples and zero of the 53 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Four of the 53 nitrate samples and six of the 53 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. Although the following evidence documents a low dissolved oxygen condition in this water segment, it does not support the conclusion that nitrate contributes to or causes a bio-stimulatory effect. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41471, Nitrate	Region 3
Mission Creek (Santa Barbara County)	

LOE ID:	50856
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50857
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50605
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]

Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50606
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate — Region 3

Mission Creek (Santa Barbara County)

LOE ID:	50607
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate — Region 3

Mission Creek (Santa Barbara County)

LOE ID:	50608
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50874
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50875
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50795
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50796
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50797
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50798
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	10652
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]

Temporal Representation: Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41471, Nitrate **Region 3**

Mission Creek (Santa Barbara County)

LOE ID: 10633

Pollutant: Nitrate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 62

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Nitrate as N.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference: Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A
Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]

Temporal Representation: Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	48486	Region 3
Mission Creek (Santa Barbara County)		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48486, PAHs (Polycyclic Aromatic Hydrocarbons)	**Region 3**
Mission Creek (Santa Barbara County)	

LOE ID:	55252
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48486, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55254
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48487 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48487, PCBs (Polychlorinated biphenyls) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55255
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 315MISxxx (315MIS-Mission Creek at Montecito Street).
Temporal Representation:	The samples were collected on 6/10/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48487, PCBs (Polychlorinated biphenyls) Region 3

Mission Creek (Santa Barbara County)

LOE ID:	79225
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 315MISxxx (315MIS-Mission Creek at Montecito Street).

Temporal Representation:	The samples were collected on 6/10/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48497 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48497, Permethrin, total **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55256
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48497, Permethrin, total **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55257
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42224 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42224, Phenanthrene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55258
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42224, Phenanthrene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55165
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42224, Phenanthrene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16976
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42224, Phenanthrene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	16977
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42235	Region 3
Mission Creek (Santa Barbara County)		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42235, Pyrene	**Region 3**
Mission Creek (Santa Barbara County)	

LOE ID:	17878
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and

	results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42235, Pyrene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17879
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42235, Pyrene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55166
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42235, Pyrene **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55167
Pollutant:	Pyrene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41472 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Eight of the 142 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 142 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41472, Temperature, water **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50836
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41472, Temperature, water **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50835

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41472, Temperature, water **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13982
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41472, Temperature, water **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13940
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 66 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41472, Temperature, water **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13960
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42250 **Region 3**

Mission Creek (Santa Barbara County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Nine of the 128 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and eight of the 128 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 128 samples exceed the evaluation guideline for Cold Freshwater Habitat and eight of the 128 samples exceed the Warm Freshwater Habitat evaluation guideline. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42250, Turbidity — Region 3

Mission Creek (Santa Barbara County)

LOE ID:	13980
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42250, Turbidity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13981
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42250, Turbidity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13923
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 57 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42250, Turbidity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13998
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42250, Turbidity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13999
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42250, Turbidity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	13939
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 57 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]

Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42250, Turbidity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50833
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42250, Turbidity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50616
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42250, Turbidity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50615
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42250, Turbidity **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50834
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42049 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 42049, Zinc — Region 3

Mission Creek (Santa Barbara County)

LOE ID:	55182
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42049, Zinc **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	55183
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [Mission Creek at Montecito Street - 315MISxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42049, Zinc **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17688
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42049, Zinc **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	17687
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected on a single day 3/25/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42251 Region 3

Mission Creek (Santa Barbara County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. One of the 140 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and two of the 140 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. of the 140 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and two of the 140 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12206
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12207
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12473
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12452
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1

	monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12186
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12187
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12453
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12454
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12455
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12456
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12471
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12190
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12472
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 2 monitoring sites [315MIS-Mission Creek at Montecito Street, 315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12208
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	12205
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50817
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50818
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50876
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50614
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50613
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50598
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50597
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50877
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50593
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIS-Mission Creek at Montecito Street]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42251, pH **Region 3**

Mission Creek (Santa Barbara County)

LOE ID:	50594
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mission Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mission Creek (Santa Barbara County) was collected at 1 monitoring site [315MIU-Mission Creek at Cathedral Oaks Road]
Temporal Representation:	Data was collected over the time period 1/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arroyo Burro Creek**
Water Body ID: **CAR3153201019990222134526**
Water Body Type: **River & Stream**

DECISION ID **36176** **Region 3**
Arroyo Burro Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 70 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty of the 70 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36176, Escherichia coli (E. coli) **Region 3**
Arroyo Burro Creek

LOE ID: 11349

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	23
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 5 of 23 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36176, Escherichia coli (E. coli) **Region 3**

Arroyo Burro Creek

LOE ID:	11350
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36176, Escherichia coli (E. coli) **Region 3**

Arroyo Burro Creek

LOE ID:	49076
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 11 of 41 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36176, Escherichia coli (E. coli) **Region 3**

Arroyo Burro Creek

LOE ID:	49077
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42377** **Region 3**

Arroyo Burro Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Forty-one of the 119 samples exceed the water quality objective for water contact recreation and 13 of the 119 samples also exceed the water quality objective for non-contact recreation. Note that data collected prior to 2005 was also associated with a now retired LOE (#1993) and

Decision, both of which used the pollutant name Â‘pathogensÂ’. The original decision to add this waterbody to the 303(d) List was supported by that information which is also captured in LOEs associated with this decision. There is no longer a decision for Arroyo Burro and the pollutant Â‘pathogensÂ’ it has been replaced with decisions for the specific indicator bacteria (i.e. fecal coliform and E. coli).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-one of the 119 samples exceed the water quality objective for water contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42377, Fecal Coliform **Region 3**

Arroyo Burro Creek

LOE ID:	11291
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42377, Fecal Coliform **Region 3**

Arroyo Burro Creek

LOE ID:	49360
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42377, Fecal Coliform **Region 3**

Arroyo Burro Creek

LOE ID:	49359
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 15 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42377, Fecal Coliform **Region 3**

Arroyo Burro Creek

LOE ID:	49228
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42377, Fecal Coliform **Region 3**

Arroyo Burro Creek

LOE ID:	11290
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]

Temporal Representation:	Data was collected over the time period 1/16/2001-3/4/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42377, Fecal Coliform **Region 3**

Arroyo Burro Creek

LOE ID:	49080
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42377, Fecal Coliform **Region 3**

Arroyo Burro Creek

LOE ID:	11331

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	59
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 6 of 59 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42377, Fecal Coliform **Region 3**

Arroyo Burro Creek

LOE ID:	11330
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 19 of 59 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36901**	**Region 3**
Arroyo Burro Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which one of the 120 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 121 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 120 samples exceed the water quality objective for unionized ammonia and zero of the 121 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36901, Ammonia **Region 3**

Arroyo Burro Creek

LOE ID:	49322
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36901, Ammonia **Region 3**

Arroyo Burro Creek

LOE ID:	49233
Pollutant:	Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36901, Ammonia **Region 3**

Arroyo Burro Creek

LOE ID:	49337
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36901, Ammonia **Region 3**

Arroyo Burro Creek

LOE ID:	49248
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36901, Ammonia **Region 3**

Arroyo Burro Creek

LOE ID:	9714
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36901, Ammonia **Region 3**

Arroyo Burro Creek

LOE ID:	9713
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36901, Ammonia **Region 3**

Arroyo Burro Creek

LOE ID:	9730
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36901, Ammonia **Region 3**

Arroyo Burro Creek

LOE ID:	9729
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52459 Region 3

Arroyo Burro Creek

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does not satisfy the data quantity requirements of section 3.9 of the Policy which requires data from at least two stations. 3. Pursuant to section 3.9 of the Listing Policy, the water does exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index, however, both samples are from the same station. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met. The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs).
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52459, Benthic Community Effects Region 3

Arroyo Burro Creek

LOE ID:	53209
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score is 39 or below and are therefore is below the impairment threshold of the Southern California IBI. In 2005, a methods comparison study was conducted in this waterbody resulting in the collection of three samples at the Arroyo Burro station and more

	than one IBI score was reported. Although samples were collected over a two day period, these samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the sample that was collected following the SWAMP Reach Wide Benthos method, or RWB, on April 28th 2005. The RWB sample included in this assessment had an IBI score of 27.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315ABUxxx-Arroyo Burro at Cliff Drive.
Temporal Representation:	Surveys done April 27th and 28th in 2005.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52459, Benthic Community Effects **Region 3**

Arroyo Burro Creek

LOE ID:	79193
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for this site are 0.512345524257565 and 0.575670352. Both samples for this site were below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the CSCI score from 4/27/2005 of 0.512345524257565.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health.Â The CSCI score is calculated by

	comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded biological condition) to greater than 1 (healthy biological condition and equivalent to reference).Â CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact healthy biological condition, 0.91 to 0.80 = possibly altered degraded biological condition, 0.79 to 0.63 = likely altered degraded biological condition, less than or equal to 0.62 = very likely altered degraded biological condition.Â Sites with scores below 0.79 are considered to have exceeded the water quality objective impaired for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 315ABUxxx-Arroyo Burro at Cliff Drive.
Temporal Representation:	Surveys done April 27th and 28th in 2005.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 41547 Region 3

Arroyo Burro Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of 117 samples exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 117 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41547, Chlorophyll-a Region 3

Arroyo Burro Creek

LOE ID:	9727
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41547, Chlorophyll-a **Region 3**

Arroyo Burro Creek

LOE ID:	49249
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41547, Chlorophyll-a **Region 3**

Arroyo Burro Creek

LOE ID:	49250
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41547, Chlorophyll-a **Region 3**

Arroyo Burro Creek

LOE ID:	9743
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41773**	**Region 3**
Arroyo Burro Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of zero water samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. The other four samples collected will not be used in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Two of two sediment samples (pore water) exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero water samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and two sediment samples (pore water) also exceeded the water quality objective however, pore water samples will not be the sole basis for any decision. Therefore, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41773, Chlorpyrifos **Region 3**

Arroyo Burro Creek

LOE ID:	47650
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [Arroyo Burro at Cliff Drive - 315ABUxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41773, Chlorpyrifos **Region 3**

Arroyo Burro Creek

LOE ID:	15988
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41773, Chlorpyrifos **Region 3**

Arroyo Burro Creek

LOE ID:	16310
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41822**	**Region 3**
Arroyo Burro Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition

of the pollutant to the Section 303(d) list.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of five samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the evaluation guideline (Finlayson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of five samples exceed the evaluation guideline (Finlayson, 2004) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41822, Diazinon **Region 3**

Arroyo Burro Creek

LOE ID:	16626
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41822, Diazinon **Region 3**

Arroyo Burro Creek

LOE ID:	16683
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41822, Diazinon **Region 3**

Arroyo Burro Creek

LOE ID:	47681
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [Arroyo Burro at Cliff Drive - 315ABUxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **36446** **Region 3**

Arroyo Burro Creek

Pollutant: **Nitrate**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 121 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Eleven of the 47 nitrate samples exceed the water quality objective for Warm Freshwater Habitat. Zero of the 47 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Seventeen of the 47 nitrate/nitrite samples exceed the water quality objective for Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Water Habitat. No evidence was found to support nitrate causing impairment for Warm water habitats: 1) Dissolved oxygen for this water body ranged from 1.48 mg/L to 14.5mg/L, rarely exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L, and rarely exceeding the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Water column chlorophyll a concentration ranged from 0.0 to 22.1 ug/L, rarely exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) did not predict that benthic algal contribution to oxygen deficit, algae biomass, or benthic chlorophyll a concentrations for this water body exceed screening thresholds for warm or cold water habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 121 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 47 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Eleven of the 47 nitrate samples exceed the water quality objective for Warm Freshwater Habitat. Seventeen of the 47 nitrate/nitrite samples exceed the water quality objective for Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Warm Water Habitat. No evidence was found to support nitrate causing impairment for Warm water habitats. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36446, Nitrate **Region 3**

Arroyo Burro Creek

LOE ID:	9728
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36446, Nitrate **Region 3**

Arroyo Burro Creek

LOE ID:	9825
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36446, Nitrate **Region 3**

Arroyo Burro Creek

LOE ID:	49251
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 10 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36446, Nitrate **Region 3**

Arroyo Burro Creek

LOE ID:	49340
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36446, Nitrate **Region 3**

Arroyo Burro Creek

LOE ID:	49341
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36446, Nitrate **Region 3**

Arroyo Burro Creek

LOE ID:	49342
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36446, Nitrate **Region 3**

Arroyo Burro Creek

LOE ID:	49264
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [

	315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36446, Nitrate **Region 3**

Arroyo Burro Creek

LOE ID:	49265
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 16 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36446, Nitrate — Region 3

Arroyo Burro Creek

LOE ID:	49266
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36446, Nitrate — Region 3

Arroyo Burro Creek

LOE ID:	49356
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42997**	**Region 3**
Arroyo Burro Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. Five lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Three LOEs summarize water samples. Four samples, collected in 2001 and 2002, are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, six total samples are available to assess this pollutant. One of the six samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water

quality objective for aquatic life protection.

Two LOEs summarize sediment samples. One sediment sample is summarized in a LOE using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in a LOE using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess this pollutant. One of the two samples exceed the water quality objective for aquatic life protection because they resulted in a significant toxic effect to the test organisms.

These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 6 water samples and one of the two sediment samples exhibited significant toxicity and therefore exceeded the water quality objective. However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42997, Toxicity **Region 3**

Arroyo Burro Creek

LOE ID:	23539
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42997, Toxicity **Region 3**

Arroyo Burro Creek

LOE ID:	23562
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive].
Temporal Representation:	Data was collected over the time period 12/3/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42997, Toxicity **Region 3**

Arroyo Burro Creek

LOE ID:	23537
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 12/3/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42997, Toxicity **Region 3**

Arroyo Burro Creek

LOE ID:	59000
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Although the sample from August 28, 2008 exhibited significant toxicity to Selenastrum capricornutum total cell count when compared to the control, the sampleÂ's conductivity was greater than 3000 uS/cm, the threshold at which Selenastrum should not be used in the test. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. Because the conductivity of the sample water is greater than the tolerance threshold for the test organism, this sample is not counted as an exceedance.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315ABUxxx - Arroyo Burro at Cliff Drive.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42997, Toxicity **Region 3**

Arroyo Burro Creek

LOE ID:	53222
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did exhibit significant toxicity to Hyalella azteca growth. The toxicity tests included survival and growth of Hyalella azteca.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315ABU - Arroyo Burro at Cliff Drive.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID **41608** **Region 3**

Arroyo Burro Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 117 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of the 117 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41608, Turbidity **Region 3**

Arroyo Burro Creek

LOE ID:	13194
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 9 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41608, Turbidity **Region 3**

Arroyo Burro Creek

LOE ID:	13175
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41608, Turbidity **Region 3**

Arroyo Burro Creek

LOE ID:	49289
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41608, Turbidity **Region 3**

Arroyo Burro Creek

LOE ID:	49288
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass

Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41608, Turbidity **Region 3**

Arroyo Burro Creek

LOE ID:	13178
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 7/17/2001-9/5/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36224** **Region 3**

Arroyo Burro Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Zero of the 129 samples exceed any of the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 129 samples exceed any of the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36224, pH — Region 3

Arroyo Burro Creek

LOE ID:	11326
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not

	be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11328
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11332
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11348
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11325
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]

Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11309
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11308
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11329
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11292
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	49358
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11310
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11311
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	11312
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	49286
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	49287
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	49230
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	49229
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	49079
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	49078
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36224, pH **Region 3**

Arroyo Burro Creek

LOE ID:	49357
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36515**	**Region 3**
Arroyo Burro Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Eight of 129 samples exceed the water quality objective for protection of Warm Freshwater Habitat and this beneifical use is supported. However, 11 of 47 samples exceed the water quality objective for protection of Fish Spawning Habitat and this use is not supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â”

and this waterbody is designated for both Spawning and Warm Water Habitats. Therefore, the use support rating for this pollutant is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 47 samples exceed the water quality objective for protection of Spawning Habitat and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	13177
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	13176
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 2 monitoring sites [315ABH-Arroyo Burro Creek at Hope Street, 315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 7/17/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	13174
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	14
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 7 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	13193
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 24 of 60 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	13192
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/16/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	13159
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 4 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/16/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	49231
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning

Number of Samples:	41
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 11 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	49268
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]

Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	49267
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	49232
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Fish Spawning
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	49285
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABH-Arroyo Burro Creek at Hope Street]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36515, Oxygen, Dissolved **Region 3**

Arroyo Burro Creek

LOE ID:	49284
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 25 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41462** **Region 3**

Arroyo Burro Creek

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41462, Anthracene **Region 3**

Arroyo Burro Creek

LOE ID:	15752
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41462, Anthracene **Region 3**

Arroyo Burro Creek

LOE ID:	15620
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	36196	Region 3
Arroyo Burro Creek		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36196, Arsenic	**Region 3**
Arroyo Burro Creek	

LOE ID:	15703
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36196, Arsenic **Region 3**

Arroyo Burro Creek

LOE ID:	15836
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41518 Region 3

Arroyo Burro Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41518, Benzo(a)anthracene Region 3

Arroyo Burro Creek

LOE ID:	15758

Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41518, Benzo(a)anthracene **Region 3**

Arroyo Burro Creek

LOE ID:	15696
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41517**	**Region 3**
Arroyo Burro Creek		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41517, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Arroyo Burro Creek

LOE ID:	15517
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41517, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Arroyo Burro Creek

LOE ID:	15387
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36173**	**Region 3**
Arroyo Burro Creek		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36173, Cadmium **Region 3**

Arroyo Burro Creek

LOE ID:	15488
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36173, Cadmium — Region 3

Arroyo Burro Creek

LOE ID:	15366
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36220 — Region 3

Arroyo Burro Creek

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36220, Chromium **Region 3**

Arroyo Burro Creek

LOE ID:	16072
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36220, Chromium **Region 3**

Arroyo Burro Creek

LOE ID:	15930
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **43976** **Region 3**

Arroyo Burro Creek

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section CWA 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43976, Chrysene (C1-C4) **Region 3**

Arroyo Burro Creek

LOE ID:	15905
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43976, Chrysene (C1-C4) **Region 3**

Arroyo Burro Creek

LOE ID:	16015
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36354** **Region 3**

Arroyo Burro Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36354, Copper **Region 3**

Arroyo Burro Creek

LOE ID:	16098
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36354, Copper **Region 3**

Arroyo Burro Creek

LOE ID:	15974
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41474** **Region 3**

Arroyo Burro Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41474, Dieldrin **Region 3**

Arroyo Burro Creek

LOE ID:	16712
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41474, Dieldrin **Region 3**

Arroyo Burro Creek

LOE ID:	16775
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41477**	**Region 3**
Arroyo Burro Creek		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d). This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples

	is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41477, Endrin **Region 3**

Arroyo Burro Creek

LOE ID:	16514
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41477, Endrin **Region 3**

Arroyo Burro Creek

LOE ID:	16372
Pollutant:	Endrin

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41478** **Region 3**

Arroyo Burro Creek

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41478, Fluoranthene **Region 3**

Arroyo Burro Creek

LOE ID:	16469
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41478, Fluoranthene **Region 3**

Arroyo Burro Creek

LOE ID:	16599
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41479** **Region 3**

Arroyo Burro Creek

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d). This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41479, Fluorene **Region 3**

Arroyo Burro Creek

LOE ID:	16586
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41479, Fluorene **Region 3**

Arroyo Burro Creek

LOE ID:	16429
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36457	Region 3
Arroyo Burro Creek		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36457, Lead	**Region 3**
Arroyo Burro Creek	

LOE ID:	17169
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36457, Lead **Region 3**

Arroyo Burro Creek

LOE ID:	17311
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [

	315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36506 Region 3

Arroyo Burro Creek

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36506, Mercury Region 3

Arroyo Burro Creek

LOE ID:	17381
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36506, Mercury **Region 3**

Arroyo Burro Creek

LOE ID:	17266
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41508**	**Region 3**
Arroyo Burro Creek		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41508, Naphthalene **Region 3**

Arroyo Burro Creek

LOE ID:	17226
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41508, Naphthalene **Region 3**

Arroyo Burro Creek

LOE ID:	17320
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36507** **Region 3**

Arroyo Burro Creek

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA ection 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36507, Nickel **Region 3**

Arroyo Burro Creek

LOE ID:	16901
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36507, Nickel **Region 3**

Arroyo Burro Creek

LOE ID:	17031
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41509** **Region 3**

Arroyo Burro Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41509, Phenanthrene **Region 3**

Arroyo Burro Creek

LOE ID:	16876
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41509, Phenanthrene **Region 3**

Arroyo Burro Creek

LOE ID:	16988
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41546** **Region 3**

Arroyo Burro Creek

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d). This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41546, Pyrene **Region 3**

Arroyo Burro Creek

LOE ID:	17118
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41546, Pyrene **Region 3**

Arroyo Burro Creek

LOE ID:	16995
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	36174	Region 3
Arroyo Burro Creek		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the CWA section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36174, Zinc	**Region 3**
Arroyo Burro Creek	

LOE ID:	17753
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36174, Zinc **Region 3**

Arroyo Burro Creek

LOE ID:	17902
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Burro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Burro Creek was collected at 1 monitoring site [315ABU-Arroyo Burro Creek at Cliff Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Carneros Creek (Santa Barbara County)**
Water Body ID: **CAR3153102019990304143658**
Water Body Type: **River & Stream**

DECISION ID **38434** **Region 3**
Carneros Creek (Santa Barbara County)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Thirty of 50 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 47 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty of 50 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38434, Escherichia coli (E. coli) **Region 3**
Carneros Creek (Santa Barbara County)

LOE ID: 50751

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38434, Escherichia coli (E. coli) **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14966
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	47
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 47 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period

	exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC1 - Los Carneros Creek at Hollister, LC2 - Los Carneros Creek at Calle Real]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38434, Escherichia coli (E. coli) Region 3

Carneros Creek (Santa Barbara County)

LOE ID:	14965
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	47
Number of Exceedances:	30
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 30 of 47 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC1 - Los Carneros Creek at Hollister, LC2 - Los Carneros Creek at Calle Real]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID 44571 Region 3

Carneros Creek (Santa Barbara County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. Four of the 59 samples exceed the water quality objective for Cold Freshwater Habitats, but 12 of the 59 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 59 samples exceed the water quality objectives for Drinking Water and Recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	12416
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	12433
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	12432
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	12415
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for

	Los Carneros Creek to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44571, pH Carneros Creek (Santa Barbara County) **Region 3**

LOE ID:	12414
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	12434
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14852

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	49
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 7 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14851
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 2 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	15125
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	49
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 7 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 44571, pH — Region 3

Carneros Creek (Santa Barbara County)

LOE ID:	15124
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 7 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 44571, pH — Region 3

Carneros Creek (Santa Barbara County)

LOE ID:	12412
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44571, pH Carneros Creek (Santa Barbara County) **Region 3**

LOE ID:	12413
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50735
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50754
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50578
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44571, pH **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50752
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42740 **Region 3**

Carneros Creek (Santa Barbara County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Glen Annie/Los Carneros Creek Nitrate TMDL
TMDL Project Code:	1057
Date TMDL Approved by USEPA:	07/31/2014
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Twenty-seven of the 59 nitrate samples and zero of the 3 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Two of 3 nitrate samples zero of the 3 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.The primary evidence that indicates there may be a risk of bio-stimulation is modeled data, therefore there is insufficient evidence that the Cold Freshwater Habitat beneficial use is impaired. Therefore, the use rating is set to insufficient information.

1) Dissolved oxygen for this water body ranged from 8.5 mg/L to 15.0 mg/L, at times exceeding the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentration ranged from 0.7 to 12.4 ug/L, not exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 2.97 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 69 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 but not the warm water screening threshold of 80 grams/m2, (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 174 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2, but not the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 .Twenty-seven of the 59 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42740, Nitrate Carneros Creek (Santa Barbara County) **Region 3**

LOE ID:	50734
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42740, Nitrate Carneros Creek (Santa Barbara County) **Region 3**

LOE ID:	50882
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42740, Nitrate **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50733
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42740, Nitrate **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50881
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42740, Nitrate **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	15043
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	50
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 26 of 50 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 42740, Nitrate **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	10601
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42704 Region 3

Carneros Creek (Santa Barbara County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the seven samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the nine samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the seven samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the nine samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42704, Ammonia **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	10599
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42704, Ammonia **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	10600
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42704, Ammonia **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50731
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42704, Ammonia **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50879
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia

	(NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42254 Region 3

Carneros Creek (Santa Barbara County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the seven samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded and the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

Line of Evidence (LOE) for Decision ID 42254, Chlorophyll-a Region 3

Carneros Creek (Santa Barbara County)

LOE ID:	50880
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42254, Chlorophyll-a **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	10602
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42706 Region 3

Carneros Creek (Santa Barbara County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Four of the 55 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 55 samples exceeded the water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42706, Oxygen, Dissolved **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	15143
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 12 of 46 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]

Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 42706, Oxygen, Dissolved **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	15087
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 4 of 45 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 42706, Oxygen, Dissolved **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14220
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42706, Oxygen, Dissolved **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14201
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42706, Oxygen, Dissolved **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14200
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42706, Oxygen, Dissolved **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14221
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Los Carneros Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42706, Oxygen, Dissolved **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50576
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42706, Oxygen, Dissolved **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50577
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42690 Region 3

Carneros Creek (Santa Barbara County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eight of the 57 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 57 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42690, Temperature, water Region 3

Carneros Creek (Santa Barbara County)

LOE ID:	50580
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42690, Temperature, water **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	15026
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 5 of 47 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters,

	Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 42690, Temperature, water **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14223
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42690, Temperature, water **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14219
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42691 **Region 3**

Carneros Creek (Santa Barbara County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 58 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 58 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42691, Turbidity **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14222
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [

	315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42691, Turbidity **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14202
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42691, Turbidity **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	14970

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 3 of 48 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 42691, Turbidity **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50579
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42739 Region 3

Carneros Creek (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for Fecal Coliform non-contact criteria is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Three lines of evidence are available in the administrative record to assess this pollutant. Six of 8 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 1 of 8 samples exceed the water quality objective for non-contact recreation

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 8 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42739, Fecal Coliform **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	12397
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42739, Fecal Coliform **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	12396
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Los Carneros Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42739, Fecal Coliform **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50753
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42739, Fecal Coliform **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	50750
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Carneros Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42435 **Region 3**

Carneros Creek (Santa Barbara County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of one samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use one of the water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42435, Chlorpyrifos **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	16122
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Los Carneros Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42725 Region 3

Carneros Creek (Santa Barbara County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero out of two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42725, Diazinon **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	16815
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42958 Region 3

Carneros Creek (Santa Barbara County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in water samples. Zero of the two water samples resulted in a significant toxic effect to one or more test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42958, Toxicity **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	24119
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42958, Toxicity **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	24111
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38433 Region 3

Carneros Creek (Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Thirty of 47 samples exceed water quality objective for Water Contact Recreation. This supports rejection of the null hypothesis. Only 1 of 47 exceed the water quality objective for Non-Contact Recreation. This beneficial use is fully supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty of 47 samples exceed the water quality objective for Water Contact Recreation and this meets or exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38433, Enterococcus **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	15002
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	47
Number of Exceedances:	41
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 41 of 47 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC1 - Los Carneros Creek at Hollister, LC2 - Los Carneros Creek at Calle Real]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 38433, Enterococcus **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	15003
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	47
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 1 of 47 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC1 - Los Carneros Creek at Hollister, LC2 - Los Carneros Creek at Calle Real]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID 43560 **Region 3**

Carneros Creek (Santa Barbara County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. Thirteen of 56 samples exceeded the water quality objectives for Agricultural Supply. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of 56 samples exceeded the water quality objectives for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43560, Specific Conductivity **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	29797
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Los Carneros Creek to determine beneficial use support and results are as follows: 13 of 49 samples exceed the criterion for Conductivity.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and

	Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 2 monitoring sites [LC2 - Los Carneros Creek at Calle Real, LC1 - Los Carneros Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/02-1/7/07. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43560, Specific Conductivity **Region 3**

Carneros Creek (Santa Barbara County)

LOE ID:	29798
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb Project) data for Los Carneros Creek to determine beneficial use support and results are as follows: 0 of 7samples exceed the criterion for Conductivity.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Carneros Creek was collected at 1 monitoring site [315LCR-Los Carneros Creek at Hollister Road]

Temporal Representation:	Data was collected over the time period 5/8/2001-12/5/2001. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Glen Annie Canyon**
Water Body ID: **CAR3153102019990304102735**
Water Body Type: **River & Stream**

DECISION ID **42598** **Region 3**
Glen Annie Canyon

Pollutant: **Toxicity**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters.

The 2010 assessment cycle language is below.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results or endpoints but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected prior to 2007 are summarized in LOEs with the test organism name as the pollutant (i.e. invertebrate toxicity). A total of four samples were collected prior to 2007 and all four samples exhibited significant toxic effects to one or more of the test organisms relative to the control tests.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the four samples exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because of a mapping change.

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**
Glen Annie Canyon

LOE ID: 24076

Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**

Glen Annie Canyon

LOE ID:	24077
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**

Glen Annie Canyon

LOE ID:	24069
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**

Glen Annie Canyon

LOE ID:	24070
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**

Glen Annie Canyon

LOE ID:	24072
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical

	test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**

Glen Annie Canyon

LOE ID:	24075
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**

Glen Annie Canyon

LOE ID:	24074
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**

Glen Annie Canyon

LOE ID:	24073
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

	December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**

Glen Annie Canyon

LOE ID:	24235
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]

Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity **Region 3**

Glen Annie Canyon

LOE ID:	24246
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity — Region 3

Glen Annie Canyon

LOE ID:	24234
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42598, Toxicity — Region 3

Glen Annie Canyon

LOE ID:	24245
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40375**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.
Regional Board Staff Decision Recommendation:	This decision is being decommissioned due to a mapping change. After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40375, Ammonia **Region 3**

Glen Annie Canyon

LOE ID:	9826
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40375, Ammonia **Region 3**

Glen Annie Canyon

LOE ID:	9744
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40375, Ammonia **Region 3**

Glen Annie Canyon

LOE ID:	14382
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40375, Ammonia **Region 3**

Glen Annie Canyon

LOE ID:	15318
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40375, Ammonia **Region 3**

Glen Annie Canyon

LOE ID:	14381
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]

Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40375, Ammonia **Region 3**

Glen Annie Canyon

LOE ID:	9745
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40359** **Region 3**

Glen Annie Canyon

Pollutant:	**Chloride**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twelve of the 15 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 15 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) List because the mapped representation of this water segment was spit or this cycle. This decision is being decommissioned (to be retired next cycle) while a copy of it as a "List" now lives with the new mapped representation of this water segment (on Tecolotito Creek).

Line of Evidence (LOE) for Decision ID 40359, Chloride **Region 3**

Glen Annie Canyon

LOE ID:	9759
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40400**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Enterococcus**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Station GA1 is located in the newly mapped Glen Annie Canyon Creek bue station GA2 is located in the newly mapped Tecolotito Creek segment downstream. When evaluating data for the station GA1 only, 36 of the 53 samples exceed the single sample maximum for protection of Water Contact Recreation (i.e. swimming) and three of the 52 samples exceed the single sample maximum for protection of Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-six of the 53 samples exceed the single sample maximum for protection of Water Contact

Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the mapped representation of this wb was merged, spit or corrected this cycle. This decision is being decommissioned (to be retired next cycle) while a copy of it as a "List" now lives with the new mapped representation of this water segments.

Line of Evidence (LOE) for Decision ID 40400, Enterococcus **Region 3**

Glen Annie Canyon

LOE ID:	14984
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	98
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 98 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40400, Enterococcus **Region 3**

Glen Annie Canyon

LOE ID:	14983

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	98
Number of Exceedances:	75
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 75 of 98 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID	**40424**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the mapped representation of this wb was merged, spit or corrected this cycle. This decision is being decommissioned (to be retired next cycle) while a copy of it as a "List" now lives with the new mapped representation of this water segments.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the mapped representation of this waterbody was spit or corrected this cycle. This decision is being decommissioned (to be retired next cycle) while a copy of it as a "List" now lives with the new mapped representation of this water segments.

Line of Evidence (LOE) for Decision ID 40424, Escherichia coli (E. coli) Region 3

Glen Annie Canyon

LOE ID:	14926
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	100
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 100 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40424, Escherichia coli (E. coli) Region 3

Glen Annie Canyon

LOE ID:	14925
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	59

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 59 of 100 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID	**40428**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Five of 14 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and zero of 14 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 14 samples exceed the evaluation guideline for contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the mapped representation of this water segment was spit this cycle and the decision is being decommissioned (to be retired next cycle) while a copy of it now lives with the new mapped downstream reach named Tecolotito Creek..

Line of Evidence (LOE) for Decision ID 40428, Fecal Coliform **Region 3**

Glen Annie Canyon

LOE ID:	11352
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40428, Fecal Coliform **Region 3**

Glen Annie Canyon

LOE ID:	11351
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40360**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Sodium**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Thirteen of the 15 samples exceed the water quality objective for Agricultural Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of the 15 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40360, Sodium **Region 3**

Glen Annie Canyon

LOE ID:	9762
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 13 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 33905 Region 3

Glen Annie Canyon

Pollutant:	**Nitrate**
Final Listing Decision:	**Delist from 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
TMDL Name:	Glen Annie/Los Carneros Creek Nitrate TMDL
TMDL Project Code:	1057
Date TMDL Approved by USEPA:	07/31/2014
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the mapped representation of this waterbody was spit or corrected this cycle. This decision is being decommissioned (to be retired next cycle) while a copy of it as a "Do Not Delist" now lives with the new mapped representation of this segment.

Line of Evidence (LOE) for Decision ID 33905, Nitrate Region 3

Glen Annie Canyon

LOE ID:	9761
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 12 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33905, Nitrate **Region 3**

Glen Annie Canyon

LOE ID:	14773
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	105
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 5 of 105 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks, GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 33905, Nitrate **Region 3**

Glen Annie Canyon

LOE ID:	14774
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	105
Number of Exceedances:	69
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 69 of 105 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA2 - Glenn Annie Creek at Cathedral Oaks, GA1 - Glenn Annie Creek at Hollister]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 33905, Nitrate — Region 3

Glen Annie Canyon

LOE ID:	15319
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33905, Nitrate — Region 3

Glen Annie Canyon

LOE ID:	9760
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33905, Nitrate **Region 3**

Glen Annie Canyon

LOE ID:	1991
Pollutant:	Nitrate as Nitrate (NO3)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Twelve out of 15 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples collected from one site.
Temporal Representation:	Samples were collected from February 2001 to March 2002.
Environmental Conditions:	The water body is located in the South Coast hydrologic area, Goleta hydrologic subarea. The site is located at Glenn Annie upstream Hollister Road (Site I.D. #315ANN).
QAPP Information:	CCAMP, SWAMP QAPP.
QAPP Information Reference(s):	

DECISION ID 40447 Region 3

Glen Annie Canyon

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40447, Anthracene Region 3

Glen Annie Canyon

LOE ID:	15734
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40447, Anthracene **Region 3**

Glen Annie Canyon

LOE ID:	15735
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40285**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40285, Arsenic — Region 3

Glen Annie Canyon

LOE ID:	15821
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40285, Arsenic — Region 3

Glen Annie Canyon

LOE ID:	15822
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40158**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40158, Benzo(a)anthracene **Region 3**

Glen Annie Canyon

LOE ID:	15679
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40158, Benzo(a)anthracene **Region 3**

Glen Annie Canyon

LOE ID:	15680

Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40190** **Region 3**

Glen Annie Canyon

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40190, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Glen Annie Canyon

LOE ID:	15501
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40190, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Glen Annie Canyon

LOE ID:	15500
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40387** **Region 3**

Glen Annie Canyon

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the 15 samples exceed the water quality objective for Agricultural supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 15 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40387, Boron **Region 3**

Glen Annie Canyon

LOE ID:	9746
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40462** **Region 3**

Glen Annie Canyon

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40462, Cadmium **Region 3**

Glen Annie Canyon

LOE ID:	15350

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40462, Cadmium **Region 3**

Glen Annie Canyon

LOE ID:	15349
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40388**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40388, Chlorophyll-a **Region 3**

Glen Annie Canyon

LOE ID:	9775
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 3/7/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

LOE ID:	9776
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 3/7/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40388, Chlorophyll-a **Region 3**
Glen Annie Canyon

LOE ID:	14383
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40388, Chlorophyll-a **Region 3**

Glen Annie Canyon

LOE ID:	14384
Pollutant:	Chlorophyll-a

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40414**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the two water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of two water samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40414, Chlorpyrifos **Region 3**

Glen Annie Canyon

LOE ID:	16311
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40414, Chlorpyrifos **Region 3**

Glen Annie Canyon

LOE ID:	16324
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson

	(2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40159 Region 3

Glen Annie Canyon

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40159, Chromium Region 3

Glen Annie Canyon

LOE ID:	16056

Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40159, Chromium **Region 3**

Glen Annie Canyon

LOE ID:	16043
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40160	Region 3
Glen Annie Canyon		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40160, Chrysene (C1-C4) **Region 3**

Glen Annie Canyon

LOE ID:	15889
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40160, Chrysene (C1-C4) **Region 3**

Glen Annie Canyon

LOE ID:	15888
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40225**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40225, Copper **Region 3**

Glen Annie Canyon

LOE ID:	15926
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40225, Copper **Region 3**

Glen Annie Canyon

LOE ID:	15925
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40399** **Region 3**

Glen Annie Canyon

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40399, Diazinon **Region 3**

Glen Annie Canyon

LOE ID:	16735
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40399, Diazinon **Region 3**

Glen Annie Canyon

LOE ID:	16684
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39571 Region 3

Glen Annie Canyon

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39571, Dieldrin Region 3

Glen Annie Canyon

LOE ID:	16695
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39571, Dieldrin **Region 3**

Glen Annie Canyon

LOE ID:	16666
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40349 Region 3

Glen Annie Canyon

Pollutant:	**Electrical Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Four of the 118 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 118 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40349, Electrical Conductivity Region 3

Glen Annie Canyon

LOE ID:	15333

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	101
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 101 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40349, Electrical Conductivity **Region 3**

Glen Annie Canyon

LOE ID:	11367
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40349, Electrical Conductivity **Region 3**

Glen Annie Canyon

LOE ID:	11387
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40458** **Region 3**

Glen Annie Canyon

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40458, Endrin **Region 3**

Glen Annie Canyon

LOE ID:	16498
Pollutant:	Endrin

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40458, Endrin **Region 3**

Glen Annie Canyon

LOE ID:	16497
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40194**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40194, Fluoranthene **Region 3**

Glen Annie Canyon

LOE ID:	16582
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40194, Fluoranthene **Region 3**

Glen Annie Canyon

LOE ID:	16583
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40207**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40207, Fluorene **Region 3**

Glen Annie Canyon

LOE ID:	16448
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40207, Fluorene **Region 3**

Glen Annie Canyon

LOE ID:	16461
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40426**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40426, Lead **Region 3**

Glen Annie Canyon

LOE ID:	17295
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40426, Lead **Region 3**

Glen Annie Canyon

LOE ID:	17294
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40435** **Region 3**

Glen Annie Canyon

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40435, Mercury **Region 3**

Glen Annie Canyon

LOE ID:	17365
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40435, Mercury **Region 3**

Glen Annie Canyon

LOE ID:	17364
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	40257	Region 3
Glen Annie Canyon		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40257, Naphthalene	**Region 3**
Glen Annie Canyon	

LOE ID:	17181
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40257, Naphthalene **Region 3**

Glen Annie Canyon

LOE ID:	17210
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40265 Region 3

Glen Annie Canyon

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40265, Nickel Region 3

Glen Annie Canyon

LOE ID:	17014
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40265, Nickel **Region 3**

Glen Annie Canyon

LOE ID:	17015
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40396** **Region 3**

Glen Annie Canyon

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 132 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and zero of the 132 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Fourteen of the 132 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and zero of the 132 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	15141
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	105
Number of Exceedances:	44
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 44 of 105 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	13245
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	15085
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	103
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 14 of 103 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	15086
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	103
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 103 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel

	Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	14398
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	14399
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	14400
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	14401
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]

Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	13210
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	13211

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	13195
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14

samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]

Temporal Representation: Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID: 13229

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat
Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	13230
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	13231

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	13196
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40396, Oxygen, Dissolved **Region 3**

Glen Annie Canyon

LOE ID:	15142
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	105
Number of Exceedances:	44
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 44 of 105 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]

Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID **40266** **Region 3**

Glen Annie Canyon

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40266, Phenanthrene **Region 3**

Glen Annie Canyon

LOE ID:	17101
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40266, Phenanthrene **Region 3**

Glen Annie Canyon

LOE ID:	17114
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40382** **Region 3**

Glen Annie Canyon

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40382, Pyrene **Region 3**

Glen Annie Canyon

LOE ID:	16946
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40382, Pyrene **Region 3**

Glen Annie Canyon

LOE ID:	16947
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40361**	**Region 3**
Glen Annie Canyon		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 132 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40361, Temperature, water **Region 3**

Glen Annie Canyon

LOE ID:	14448
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40361, Temperature, water **Region 3**

Glen Annie Canyon

LOE ID:	13249
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40361, Temperature, water **Region 3**

Glen Annie Canyon

LOE ID:	13228
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40361, Temperature, water **Region 3**

Glen Annie Canyon

LOE ID:	15010
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	103
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 103 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID 40407 — Region 3

Glen Annie Canyon

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Six of the 129 samples exceed the evaluation guidelines for cold freshwater habitat (Sigler et al. 1984) and warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 129 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40407, Turbidity — Region 3

Glen Annie Canyon

LOE ID:	13227
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40407, Turbidity **Region 3**

Glen Annie Canyon

LOE ID:	13247
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40407, Turbidity **Region 3**

Glen Annie Canyon

LOE ID:	13248
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40407, Turbidity **Region 3**

Glen Annie Canyon

LOE ID:	13213
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40407, Turbidity **Region 3**

Glen Annie Canyon

LOE ID:	14434
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40407, Turbidity **Region 3**

Glen Annie Canyon

LOE ID:	14969
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	100
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 100 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and

	Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40407, Turbidity **Region 3**

Glen Annie Canyon

LOE ID:	14968
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	100
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 100 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]

Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40407, Turbidity **Region 3**

Glen Annie Canyon

LOE ID:	14435
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40385** **Region 3**

Glen Annie Canyon

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to Warm or Cold aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40385, Zinc **Region 3**

Glen Annie Canyon

LOE ID:	17884
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40385, Zinc **Region 3**

Glen Annie Canyon

LOE ID:	17883
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40459 Region 3

Glen Annie Canyon

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being decommissioned due to a mapping change. The data associated with this decision were collected from stations located two different, newly delineated reaches of the creek; Tecolotito Creek which is mapped from Highway101 to the Goleta Slough and Glen Annie Canyon Creek which is mapped from Highway 101 upstream to the headwaters. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Two of the 129 samples exceed the water quality objective for Agricultural Supply. Zero of the 129 samples exceed the water quality objectives for Warm and Cold Freshwater Habitats. Seven of the 129 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 129 samples exceed the water quality objective for Agricultural Supply. Zero of the 129 samples exceed the water quality objectives for Warm and Cold Freshwater Habitats. Seven of the 129 samples exceed the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40459, pH Region 3

Glen Annie Canyon

LOE ID:	14831
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	100
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 100 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14432
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14849
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	100
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 6 of 100 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.

QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14850
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	100
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 100 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14832
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	100
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 100 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14833
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	100
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 6 of 100 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [

	GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11388
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11406

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11369
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11370
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11402
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11368
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11384
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11385
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11386
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11403

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11404
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	11405
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315ANN-Glenn Annie Creek u/s Holister Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14417
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14418
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14414
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14415
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14416
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 1 monitoring site [315GAN - Glen Annie Creek]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40459, pH **Region 3**

Glen Annie Canyon

LOE ID:	14848
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	100
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Glenn Annie Creek to determine beneficial use support and results are as follows: 6 of 100 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Glenn Annie Creek was collected at 2 monitoring sites [GA1 - Glenn Annie Creek at Hollister, GA2 - Glenn Annie Creek at Cathedral Oaks]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Atascadero Creek (Santa Barbara County)**
Water Body ID: **CAR3153101119990222145750**
Water Body Type: **River & Stream**

DECISION ID **37460** **Region 3**
Atascadero Creek (Santa Barbara County)

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Ninty-nine of the 120 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ninty-nine of the 120 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37460, Chloride **Region 3**
Atascadero Creek (Santa Barbara County)

LOE ID: 9823

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	53
Number of Exceedances:	43
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 43 of 53 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37460, Chloride **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49574
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37460, Chloride **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9620
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 12 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37460, Chloride **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49559
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 33 of 40 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37279** **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Seventy-four of the 233 samples exceed the water quality objective for water contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-four of the 233 samples exceed the water quality objective for water contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37279, Escherichia coli (E. coli) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	14943
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	156
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 9 of 156 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period

	exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37279, Escherichia coli (E. coli) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	14927
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	51
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 51 of 156 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37279, Escherichia coli (E. coli) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	11514
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 9 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37279, Escherichia coli (E. coli) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49562
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 12 of 40 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37279, Escherichia coli (E. coli) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	11515
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/6/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37279, Escherichia coli (E. coli) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49563
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37329** **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Fourty of the 127 samples exceed the water quality objective for water contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourty of the 127 samples exceed the water quality objective for water contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37329, Fecal Coliform **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11476
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	61
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 4 of 61 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37329, Fecal Coliform **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11475
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 15 of 61 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37329, Fecal Coliform **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11530
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 7 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37329, Fecal Coliform **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49561
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero

	Creek(315) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37329, Fecal Coliform **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49560
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 14 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37329, Fecal Coliform **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11531
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37329, Fecal Coliform **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49579
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37329, Fecal Coliform **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49580
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero

	Creek(315) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37619 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Two beneficial uses are assessed. Sixty-eight of 279 samples exceed the Cold Freshwater Habitat objective for dissolved oxygen. This beneficial uses is not supported. Sixty-eight of the 279 samples exceed the objective for Warm Freshwater Habitat and this beneficial use is supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty-eight of 279 samples exceed the Cold Freshwater Habitat objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49666
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 11 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49669
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49668
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 18 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49667
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49631

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49632
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49633
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 18 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49634
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15144
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	145
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 47 of 145 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and

	Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15145
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	145
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 47 of 145 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]

Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15103
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	147
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 9 of 147 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15088
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	147
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 31 of 147 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13070
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13071
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13072
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13073

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13301
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 23 of 59 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13302
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 23 of 59 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [

	315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13286
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 7 of 59 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13320

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13321
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13322
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13323
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37619, Oxygen, Dissolved **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13285
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 14 of 59 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37594 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One hundred and seven of the 120 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred and seven of the 120 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37594, Sodium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9837
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	53
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 47 of 53 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37594, Sodium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9637
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 13 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37594, Sodium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49612
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	36

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 36 of 40 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37594, Sodium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49626
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium

	exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37406 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Sixty-nine of the 285 samples exceed the evaluation guideline (Moyle, 1976) set to protect for steelhead trout. In addition, A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Atascadero Creek (in the Goleta Slough watershed) as having "Definite run or population". In addition, CCAMP staff has observed steelhead in the Creek on multiple occasions. Therefore this temperature Evaluation Guideline is relevant to the waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-nine of the 285 samples exceed the evaluation guideline (Moyle, 1976) set to protect for steelhead trout and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37406, Temperature, water Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	49370
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 7 of 40 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37406, Temperature, water **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49521
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37406, Temperature, water **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13319
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 15 of 59 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37406, Temperature, water **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13055
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37406, Temperature, water **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13090
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37406, Temperature, water **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15027
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	153
Number of Exceedances:	40

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 40 of 153 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

DECISION ID 37133 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Thirty-six lines of evidence are available in the administrative record to assess this pollutant. Six Beneficial Uses are assessed. The pH levels in Atascadero Creek do not support the municipal and domestic supply (drinking water) or recreation beneficial uses. Forty-nine of the 290 samples exceed the water quality objectives for Recreation and for Municipal and Domestic Supply. The pH levels in Atascadero Creek do however support agriculture and aquatic life beneficial uses as 39 of the 290 samples exceed the water quality objective for Agricultural Supply and 27 of the 290 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-nine of the 290 samples exceed the water quality objectives for Recreation and for Municipal and Domestic Supply and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11495
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49546
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11492
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11344
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49545
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49564
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49651
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	14868
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	160
Number of Exceedances:	46
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 46 of 160 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	14869
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	160
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 25 of 160 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49578
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49366
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49367
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11533
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11547
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11548
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11549
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11550
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11512
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11551
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11513
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11327
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and

	Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11343
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11345
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11478
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of

	59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11493
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11494
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49650

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15126
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	160
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 37 of 160 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15162
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	160
Number of Exceedances:	46
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 46 of 160 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15161
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	160
Number of Exceedances:	46
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 46 of 160 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15160
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	160
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 25 of 160 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11496
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49611
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49610
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49582
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37133, pH **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49581
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]

Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37543 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data and two aquatic life beneficial uses. Zero of the 121 samples exceed the unionized ammonia water quality objective set to protect aquatic life beneficial uses. Four LOEs summarize total ammonia data and zero of the 127 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed any of the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37543, Ammonia Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	9855
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9854
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries)

	states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9808
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9821
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9853
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9809
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section

	II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49522
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49523
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49598
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49628
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49627
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37543, Ammonia **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49597
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36657 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36657, Arsenic **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15770
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36657, Arsenic **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15756
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36657, Arsenic **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15853
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36657, Arsenic **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15852
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36657, Arsenic **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53283
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36657, Arsenic **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53282
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46803 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single

sample did not exceed the evaluation guideline for bifenthrin (Amweg et al., 2005) used to interpret the narrative water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. [NUMBER] of [NUMBER] samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Furthermore, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46803, Bifenthrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53285
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl

butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46803, Bifenthrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53286
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	36658	Region 3
Atascadero Creek (Santa Barbara County)		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Six of the 120 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 120 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36658, Boron	**Region 3**
Atascadero Creek (Santa Barbara County)	

LOE ID:	9822
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	53
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 53 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36658, Boron **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49557
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36658, Boron **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9856
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36658, Boron **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49558
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37549 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37549, Cadmium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15552
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37549, Cadmium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15551
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37549, Cadmium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15395
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37549, Cadmium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15382
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37549, Cadmium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53288
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37549, Cadmium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53287
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46804** **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46804, Chlordane **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53289
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at

	1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46804, Chlordane **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53290
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41553 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Three of the 121 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 121 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41553, Chlorophyll-a **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49613
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41553, Chlorophyll-a **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49629
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [

	315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41553, Chlorophyll-a **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49599
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41553, Chlorophyll-a **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9621
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41553, Chlorophyll-a **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49646
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41553, Chlorophyll-a **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9838
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41553, Chlorophyll-a **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9622
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41553, Chlorophyll-a **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9839
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of

	59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41385 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of zero samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Four water samples will not be used in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.

The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). Two of two sediment samples (pore water) exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Each sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero samples the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). Two of two sediment samples (pore water) exceeded the evaluation guideline; however, pore water results will not be the sole basis for any decision. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41385, Chlorpyrifos **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	47686
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41385, Chlorpyrifos **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	47651
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41385, Chlorpyrifos **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16004
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41385, Chlorpyrifos **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16005
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41385, Chlorpyrifos **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16326
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41385, Chlorpyrifos **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16327
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41385, Chlorpyrifos **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53291
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl

butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41385, Chlorpyrifos **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53292
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36855 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and therefore this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36855, Chromium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53293
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36855, Chromium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53294
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36855, Chromium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16088
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36855, Chromium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15994
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36855, Chromium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15993
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36855, Chromium **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16089
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	36648	Region 3
Atascadero Creek (Santa Barbara County)		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and therefore this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36648, Copper	**Region 3**
Atascadero Creek (Santa Barbara County)	

LOE ID:	15908
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36648, Copper **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16748
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36648, Copper **Region 3**
Atascadero Creek (Santa Barbara County)

LOE ID:	16747
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36648, Copper **Region 3**
Atascadero Creek (Santa Barbara County)

LOE ID:	15895
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36648, Copper **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53295
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36648, Copper **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53296
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at

	1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46805 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the Evaluation Guideline for cyfluthrin (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline for cyfluthrin (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46805, Cyfluthrin Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53297
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46805, Cyfluthrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53298
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46806 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline for lambda-cyhalothrin (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline for lambda-cyhalothrin (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46806, Cyhalothrin, Lambda Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53299
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46806, Cyhalothrin, Lambda **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53300
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46807 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline for cypermethrin (Maund et al., 2002) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline for cypermethrin (Maund et al., 2002) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46807, Cypermethrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53301
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46807, Cypermethrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53302
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46808** **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to

result in addition of the pollutant to the Section 303(d) list.

The single sample did not exceed the evaluation guideline for sum of DDD (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline for sum of DDD (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46808, DDD (Dichlorodiphenyldichloroethane) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53303
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46808, DDD (Dichlorodiphenyldichloroethane) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53304
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46809 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant: DDE (Dichlorodiphenyldichloroethylene)

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline for sum of DDE (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline for sum of DDE (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46809, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53305
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46809, DDE (Dichlorodiphenyldichloroethylene) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53306
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46810 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four line of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for DDT (MacDonald et al., 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline for DDT (MacDonald et al., 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46810, DDT (Dichlorodiphenyltrichloroethane) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53307
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46810, DDT (Dichlorodiphenyltrichloroethane) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53308
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46810, DDT (Dichlorodiphenyltrichloroethane) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53333
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46810, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53334
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46811 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to

result in addition of the pollutant to the Section 303(d) list.

The single sample did not exceed the evaluation guideline for deltamethrin (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline for deltamethrin (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46811, Deltamethrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53309
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).

Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46811, Deltamethrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53310
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 44203 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Zero of the five water samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the two sediment samples exceed the evaluation guideline for sediment (Ding et. al, 2011). Zero of the two sediment samples (pore water) exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the samples exceed the Evaluation Guideline (Finlayson, 2004) as it applies to aquatic life beneficial uses and therefore this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44203, Diazinon — Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53311
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44203, Diazinon **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53312
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44203, Diazinon **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16644
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44203, Diazinon **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16643
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44203, Diazinon **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16751
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44203, Diazinon **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	47682
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44203, Diazinon **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	47666
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water

	quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/19/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44203, Diazinon **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16750
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	41571	Region 3
Atascadero Creek (Santa Barbara County)		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and therefore this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41571, Dieldrin	**Region 3**
Atascadero Creek (Santa Barbara County)	

LOE ID:	16679
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41571, Dieldrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16614
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41571, Dieldrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16680
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41571, Dieldrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16615
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41571, Dieldrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53313
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41571, Dieldrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53314
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41572 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and therefore this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41572, Endrin Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53315
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41572, Endrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53316
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41572, Endrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16842
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41572, Endrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16530
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41572, Endrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16436
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41572, Endrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16435
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 46812 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline for esfenvalerate/fenvalerate (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline for esfenvalerate/fenvalerate(Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46812, Esfenvalerate/Fenvalerate Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53317
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46812, Esfenvalerate/Fenvalerate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53318
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46813 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline for fenpropathrin (Ding et al., 2011) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline for fenpropathrin (Ding et al., 2011) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46813, Fenpropathrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53319
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46813, Fenpropathrin **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53320
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **34128** **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to

result in addition of the pollutant to the Section 303(d) list.
Six lines of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and therefore this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 34128, Lead **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17232
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]

Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34128, Lead **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17328
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34128, Lead **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17327
Pollutant:	Lead

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34128, Lead **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17233
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34128, Lead **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53321
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34128, Lead **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53322
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46814 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline for lindane/gamma-HCH(MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline for lindane/gamma-HCH(MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46814, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53323
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46814, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53324
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara county) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara county) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37295	Region 3
Atascadero Creek (Santa Barbara County)		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Six lines of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and therefore this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37295, Mercury	**Region 3**
Atascadero Creek (Santa Barbara County)	

LOE ID:	53325
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37295, Mercury **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53326
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37295, Mercury **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16538
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37295, Mercury **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16537
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37295, Mercury **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17129
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37295, Mercury **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17142
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	46815	Region 3
Atascadero Creek (Santa Barbara County)		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline for methyl parathion (Ding et al., 2011) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline for methyl parathion (Ding et al., 2011) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46815, Methyl Parathion	**Region 3**
Atascadero Creek (Santa Barbara County)	

LOE ID:	53328
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46815, Methyl Parathion **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53327
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37282 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Six lines of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and therefore this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37282, Nickel Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	17048
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37282, Nickel **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17047
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37282, Nickel **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16953
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37282, Nickel **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16952
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37282, Nickel **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53330
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37282, Nickel **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53329
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46816 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 52 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 52 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46816, Nitrogen, Nitrite Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	49609
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46816, Nitrogen, Nitrite **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49595
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46817 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline for permethrin (Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline for permethrin(Amweg et al., 2005) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46817, Permethrin, total Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	53331
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46817, Permethrin, total **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53332
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36840 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Six lines of evidence are available in the administrative record to assess this pollutant. Thirty-two of the 281 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-two of the 281 samples exceed the water quality objective and this does not exceed the

allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36840, Specific Conductivity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49575
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 10 of 40 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36840, Specific Conductivity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49576

Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36840, Specific Conductivity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15067
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	152
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 15 of 152 samples exceed the criterion for Conductivity(Us).

Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 36840, Specific Conductivity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11477
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 6 of 59 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36840, Specific Conductivity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11532
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36840, Specific Conductivity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	11511
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41559** **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the

Conclusion:	Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Twenty-six of the 279 samples exceed the evaluation guideline set to protect for cold freshwater habitat and 23 of the 279 samples exceed the evaluation guideline set to protect for warm freshwater habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-six of the 279 samples exceed the evaluation guideline set to protect for cold freshwater habitat and 23 of the 279 samples exceed the evaluation guideline set to protect for warm freshwater habitat. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49368
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 7 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49369
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49652
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49653
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13053
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13089
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13088
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13304
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 6 of 50 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13305
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 6 of 50 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	14987
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	158
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 6 of 158 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	14971
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	158
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 6 of 158 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 41559, Turbidity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13054
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37049 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and therefore this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37049, Zinc Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	17813
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37049, Zinc **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17828
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37049, Zinc **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17921
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37049, Zinc **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17920
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37049, Zinc **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53279
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37049, Zinc **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53278
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Atascadero Creek (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Atascadero Creek (Santa Barbara County) was collected at 1 monitoring site [Atascadero Creek at Ward Drive - 315ATAxxx]
Temporal Representation:	Data was collected on a single day 5/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46802 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this indicator and 16 supporting lines of evidence are available to show impacts to aquatic life uses. One benthic invertebrate LOE summarized data scored using the Southern California IBI and the other LOE summarized two benthic invertebrate samples scored using CSCI. The two samples scored below 0.79 on the CSCI and are therefore is below the impairment threshold. This water body segment if also on the CWA Section 303(d) List for Nitrate, Low Dissolved Oxygen, elevated water temperature and sediment toxicity. Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies does not satisfy the data quantity requirements of section 3.9 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index and there are is supporting evidence showing pollutant concentrations and toxic effects are

impacting aquatic life uses in this water body segment. Therefore this water body segment meets the requirement of Section 3.9 of the listing policy for placement on the 303(d) List.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs).

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15088
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	147
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 31 of 147 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49648
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49647
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	38
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 16 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Two sample results were reported as non-detect or detected not qualified and the detection limit was above the guideline. Because these results are considered estimated, these two samples were not used in analysis and are from 11/18/08 and 7/23/09.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49370
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 7 of 40 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13285
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 14 of 59 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13055
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13070
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13090
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13319
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 15 of 59 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	13320
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/13/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49521
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15027
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	153
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 40 of 153 samples exceed the criterion for

	Water Temperature.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	79202
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for this site are 0.412362556831365 and 0.396909667. This site is below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use. Although samples were collected over a two day period, these samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the CSCI score from the sample that was collected following the SWAMP Reach Wide Benthos method, or RWB, on April 28th 2005 of 0.396909667128229.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in

	a stream into an overall measure of stream health.Â The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded biological condition) to greater than 1 (healthy biological condition and equivalent to reference).Â CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact healthy biological condition, 0.91 to 0.80 = possibly altered degraded biological condition, 0.79 to 0.63 = likely altered degraded biological condition, less than or equal to 0.62 = very likely altered degraded biological condition.Â Sites with scores below 0.79 are considered to have exceeded the water quality objective impaired for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 315ATAxxx-Atascadero Creek at Ward Drive
Temporal Representation:	Surveys done on April 27, 2005 and April 28, 2005.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53284
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score is 39 or below and are therefore is below the impairment threshold of the Southern California IBI. In 2005, a methods comparison study was conducted in this waterbody resulting in the collection of three samples at the Atascadero Creek station and more than one IBI score was reported. Although samples were collected over a two day period, these samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the sample that was collected following the SWAMP Reach Wide Benthos method, or RWB, on April 28th 2005. The RWB sample included in this assessment had an IBI score of 10.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315ATAxxx-Atascadero Creek at Ward Drive
Temporal Representation:	Surveys done on April 27, 2005 and April 28, 2005.

Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49667
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53336
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did exhibit significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315ATAxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49666
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 11 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46802, Benthic Community Effects **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53335
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did exhibit significant toxicity to Hyalella azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315ATAxxx.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID 36865 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Twenty lines of evidence are available in the administrative record to assess this pollutant. Zero of the 319 nitrate samples exceed the water quality objective for the Agricultural Supply beneficial use. Two of the 319 nitrate samples and zero of the 50 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply (drinking water) beneficial uses.

However, when the data are assessed using the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat, 15 of the 50 nitrate samples and 15 of the 48 nitrate/nitrite samples exceed. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1. This water segment is on the 303(d) List for low dissolved oxygen. Dissolved oxygen for this water body ranged from 1.84 mg/L to 19.66 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. In addition, this waterbody often exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2. Floating algal mats ranged from 0 to 90 % cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3. Water column chlorophyll a concentration ranged from 0 to 150 ug/L, often exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 50 nitrate samples and 15 of the 48 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36865, Nitrate — Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	9636
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9824
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9836
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 3/7/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49541
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49542

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49543
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49544
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49630
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	14793
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	192
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 2 of 192 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive, AT7 - Atascadero Creek]
Temporal Representation:	Data was collected over the time period 10/23/2000-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49647
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 16 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Two sample results were reported as non-detect or detected not qualified and the detection limit was above the guideline. Because these results are considered estimated, these two samples were not used in analysis and are from 11/18/08 and 7/23/09.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	14792
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	192
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 192 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive, AT7 - Atascadero Creek]
Temporal Representation:	Data was collected over the time period 10/23/2000-1/7/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49648
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49649
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 16 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Two sample results were reported as non-detect or detected not qualified and the detection limit was above the guideline. Because these results are considered estimated, these two samples were not used in analysis and are from 11/18/08 and 7/23/09.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49577
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	9623
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of

	15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49665
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49615
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [

	315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49614
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 16 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Two sample results were reported as non-detect or detected not qualified and the detection limit was above the guideline. Because these results are considered estimated, these two samples were not used in analysis and are from 11/18/08 and 7/23/09.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49616
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 16 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Two sample results were reported as non-detect or detected not qualified and the detection limit was above the guideline. Because these results are considered estimated, these two samples were not used in analysis and are from 11/18/08 and 7/23/09.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36865, Nitrate **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	49592
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 1/29/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42944 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Six LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and two additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in sediment samples. Two of the three sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Five LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, six total samples are available to assess toxic effects in water samples. One of the six water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the three sediment samples resulted toxic effects to the test organism and therefore exceed the water quality objective. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53336
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did exhibit significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315ATAxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	53277
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selenastrum capricornutum cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315ATAxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.

Environmental Conditions:
QAPP Information: The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID: 53335

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. The sample did exhibit significant toxicity to Hyalella azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference: Statewide Stream Pollution Trends Study 2008

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference: Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation: The sample was collected at station 315ATAxxx.
Temporal Representation: The sample was collected in May 2008.
Environmental Conditions:
QAPP Information: The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID: 78940

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did exhibit significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315ATAxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	78939
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did exhibit significant toxicity to Hyalella azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315ATAxxx.
Temporal Representation:	The sample was collected in May 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	23613
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

	December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	23609
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	23617
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATU-Atascadero Creek at Patterson Avenue, 315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	23618

Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATU-Atascadero Creek at Patterson Avenue, 315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	23614
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42944, Toxicity **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	23610
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less

	than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 2 monitoring sites [315ATA-Atascadero Creek at Ward Drive , 315ATU-Atascadero Creek at Patterson Avenue]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41583 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41583, Anthracene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15684
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41583, Anthracene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	14815

Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41583, Anthracene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15683
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41583, Anthracene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15768
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [

	315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41595 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41595, Benzo(a)anthracene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15664
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41595, Benzo(a)anthracene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15665
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41595, Benzo(a)anthracene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15825
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41595, Benzo(a)anthracene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15824
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41584 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41584, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15534
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41584, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	15533
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41584, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15438
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41584, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15451
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41531 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41531, Chrysene (C1-C4) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15922
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41531, Chrysene (C1-C4) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15921

Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41531, Chrysene (C1-C4) **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16078
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41531, Chrysene (C1-C4) Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	16079
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [

	315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41573 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41573, Fluoranthene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16533
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41573, Fluoranthene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16520
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41573, Fluoranthene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16361
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41573, Fluoranthene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16362
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41535 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeds the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeds the exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41535, Fluorene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16398
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41535, Fluorene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16397
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41535, Fluorene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16477
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41535, Fluorene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16478
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41576 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples

	is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41576, Naphthalene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17132
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41576, Naphthalene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17195
Pollutant:	Naphthalene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41576, Naphthalene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17194
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41576, Naphthalene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17131
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41577 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41577, Phenanthrene Region 3

Atascadero Creek (Santa Barbara County)

LOE ID:	16893
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41577, Phenanthrene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17051
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41577, Phenanthrene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17052
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41577, Phenanthrene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16892
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41589 **Region 3**

Atascadero Creek (Santa Barbara County)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41589, Pyrene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16916
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41589, Pyrene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	16930
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41589, Pyrene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17826
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41589, Pyrene **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	17825
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 1 monitoring site [315ATA-Atascadero Creek at Ward Drive]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36635 Region 3

Atascadero Creek (Santa Barbara County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Eighty-six out of 157 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this supports rejection of the null hypotheses. Only 7 of 157 samples exceed the water quality objective for Non-Contact Recreation and therefore this beneficial use is fully supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighty-six out of 157 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this meets or exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36635, Enterococcus **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	14985
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	157
Number of Exceedances:	86
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 86 of 157 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Line of Evidence (LOE) for Decision ID 36635, Enterococcus **Region 3**

Atascadero Creek (Santa Barbara County)

LOE ID:	15104

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	157
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Barbara Channelkeepers Citizen Monitoring Program (R3_SBKeepers) data for Atascadero Creek(315) to determine beneficial use support and results are as follows: 7 of 157 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(315) was collected at 3 monitoring sites [AT1 - Atascadero Creek at Ward Drive, AT2 - Atascadero Creek at Patterson Drive, AT3 - Atascadero Creek at Puente Drive]
Temporal Representation:	Data was collected over the time period 6/2/2002-2/4/2007. Santa Barbara Channelkeepers Citizen Monitoring is conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP, data entry completed by volunteers. Several errors were identified in data and were flagged or fixed by RB staff (in communication with SB Channel Keepers) prior to assessment of data.
QAPP Information Reference(s):	e-mail documenting QA procedures and analytical methods uses for sample analysis

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Jalama Creek**
Water Body ID: **CAR3151005119990304115034**
Water Body Type: **River & Stream**

DECISION ID **41687** **Region 3**
Jalama Creek

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Natural Sources
TMDL Name: Jalama Creek Sodium and Chloride TMDL
TMDL Project Code: 1075
Date TMDL Approved by USEPA: 09/04/2013
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Fifty-three of the 61 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-three of the 61 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Jalama Creek Chloride and Sodium TMDL has been approved by USEPA on September 4, 2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41687, Chloride **Region 3**
Jalama Creek

LOE ID: 50327

Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 23 of 26 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41687, Chloride **Region 3**

Jalama Creek

LOE ID:	10568
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 30 of 35 samples exceed the criterion for Chloride.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41197	Region 3
Jalama Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
TMDL Name:	Jalama Creek Sodium and Chloride TMDL
TMDL Project Code:	1075
Date TMDL Approved by USEPA:	09/04/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Fifty-six of the 61 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-six of the 61 samples exceed the water quality objective and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. The Jalama Creek Chloride and Sodium TMDL has been approved by USEPA on September 4, 2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41197, Sodium **Region 3**

Jalama Creek

LOE ID:	10584
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 32 of 35 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41197, Sodium **Region 3**

Jalama Creek

LOE ID:	50333
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 24 of 26 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40654** **Region 3**

Jalama Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 61 samples exceed the Basin Plan general water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 61 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 61 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40654, Ammonia **Region 3**

Jalama Creek

LOE ID:	10565
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40654, Ammonia **Region 3**

Jalama Creek

LOE ID:	10566
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40654, Ammonia **Region 3**

Jalama Creek

LOE ID:	50355
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40654, Ammonia **Region 3**

Jalama Creek

LOE ID:	50334
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47626 Region 3

Jalama Creek

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, one of the 3 samples exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the SoCal IBI. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47626, Benthic Community Effects Region 3

Jalama Creek

LOE ID:	54536

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the three of the IBI scores is 39 or below and are therefore are below the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in this waterbody resulting in the collection of more than one sample at the Jalama Creek station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the 2007 sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The three RWB samples included in this assessment have the following IBI scores: The 2005 sample IBI score was 34, the 2007 sample IBI score was 40 and the 2008 sample IBI score was 50.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315JALxxx-Jalama Creek at County Park at RR trussels.
Temporal Representation:	Surveys done on April 27, 2005; April 12, 2007; and May 6, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	**41754**	**Region 3**
Jalama Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 61 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 61 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41754, Boron **Region 3**

Jalama Creek

LOE ID:	10567
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41754, Boron **Region 3**

Jalama Creek

LOE ID:	50326
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 2 of 26 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41241** **Region 3**

Jalama Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 58 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 58 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41241, Chlorophyll-a **Region 3**

Jalama Creek

LOE ID:	10585
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 5/8/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41241, Chlorophyll-a **Region 3**

Jalama Creek

LOE ID:	50356
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]

Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40944	Region 3
Jalama Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of zero water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use two of the water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.One sediment sample (pore water) was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40944, Chlorpyrifos **Region 3**

Jalama Creek

LOE ID:	47730
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [Jalama Creek at County Park at RR trussels - 315JALxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40944, Chlorpyrifos **Region 3**

Jalama Creek

LOE ID:	16121
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41016**	**Region 3**
Jalama Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water).

LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41016, Diazinon **Region 3**

Jalama Creek

LOE ID:	47677
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [Jalama Creek at County Park at RR trussels - 315JALxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41016, Diazinon **Region 3**

Jalama Creek

LOE ID:	47661
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [Jalama Creek at County Park at RR trussels - 315JALxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41016, Diazinon **Region 3**

Jalama Creek

LOE ID:	16814
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41160	Region 3
Jalama Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for E. coli non-contact recreation is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Seven of 44 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986)

set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 18 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 44 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 18 samples exceed the water quality objective for non-contact recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41160, Escherichia coli (E. coli) **Region 3**

Jalama Creek

LOE ID:	12374
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 1/5/2005-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41160, Escherichia coli (E. coli) **Region 3**

Jalama Creek

LOE ID:	12373
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 1/5/2005-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41160, Escherichia coli (E. coli) **Region 3**

Jalama Creek

LOE ID:	50340
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	26
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 5 of 26 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40968**	**Region 3**
Jalama Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Nine of 60 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 3 of 60 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of 60 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 3 of 60 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40968, Fecal Coliform **Region 3**

Jalama Creek

LOE ID:	50339
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 6 of 26 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40968, Fecal Coliform **Region 3**

Jalama Creek

LOE ID:	50352
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40968, Fecal Coliform **Region 3**

Jalama Creek

LOE ID:	12336
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	34
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 2 of 34 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40968, Fecal Coliform **Region 3**

Jalama Creek

LOE ID:	12335
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 3 of 34 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40969** **Region 3**

Jalama Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 61 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 26 nitrate samples exceeds the water quality objective for the Warm Freshwater Habitat beneficial use. Zero of the 26 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 26 nitrate/nitrite samples exceeds the water quality objective for Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. Insufficient evidence was found to support nitrate as a cause of impairment for Warm Freshwater habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 61 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 26 nitrate samples exceeds the water quality objective for the Warm Freshwater Habitat beneficial use. Zero of the 26 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 26 nitrate/nitrite samples exceeds the water quality objective for Warm Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40969, Nitrate **Region 3**

Jalama Creek

LOE ID:	10582
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40969, Nitrate **Region 3**

Jalama Creek

LOE ID:	10583
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40969, Nitrate **Region 3**

Jalama Creek

LOE ID:	50330
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-

	Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40969, Nitrate **Region 3**

Jalama Creek

LOE ID:	50329
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40969, Nitrate **Region 3**

Jalama Creek

LOE ID:	50368
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40969, Nitrate **Region 3**

Jalama Creek

LOE ID:	50337
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40969, Nitrate **Region 3**

Jalama Creek

LOE ID:	50336
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40969, Nitrate **Region 3**

Jalama Creek

LOE ID:	50367
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47627	Region 3
Jalama Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47627, Nitrogen, Nitrite	**Region 3**
Jalama Creek	

LOE ID:	50331
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40953	Region 3
Jalama Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. One of the 67 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and one of the 26 samples exceed the water quality objective for Spawning Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 67 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and one of the 26 samples exceed the water quality objective for Spawning Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40953, Oxygen, Dissolved **Region 3**

Jalama Creek

LOE ID:	50354
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40953, Oxygen, Dissolved **Region 3**

Jalama Creek

LOE ID:	50370
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 2 of 26 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40953, Oxygen, Dissolved **Region 3**

Jalama Creek

LOE ID:	50369
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40953, Oxygen, Dissolved — Region 3

Jalama Creek

LOE ID:	14177
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40953, Oxygen, Dissolved — Region 3

Jalama Creek

LOE ID:	14178
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	35

Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 6 of 35 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40953, Oxygen, Dissolved **Region 3**

Jalama Creek

LOE ID:	14198
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 8/10/2004-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40953, Oxygen, Dissolved **Region 3**

Jalama Creek

LOE ID:	14199
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Jalama Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 8/10/2004-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41116 Region 3

Jalama Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 65 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 65 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41116, Specific Conductivity — Region 3

Jalama Creek

LOE ID:	12375
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 8/4/2005-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41116, Specific Conductivity **Region 3**

Jalama Creek

LOE ID:	12337
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]

Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41116, Specific Conductivity **Region 3**

Jalama Creek

LOE ID:	50328
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42597** **Region 3**

Jalama Creek

Pollutant: **Toxicity**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. One LOE summarizes sediment samples. Zero sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, one total sample is available to assess toxic effects in sediment samples. Zero of the one sediment samples resulted in a significant toxic effect to one or more test organisms. Three LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in water samples. One of the four water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one sediment sample and one of the four water samples resulted in a significant toxic effect to one or more test organisms and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42597, Toxicity **Region 3**

Jalama Creek

LOE ID:	54537
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315JALxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42597, Toxicity **Region 3**

Jalama Creek

LOE ID:	54538
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Although both of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count when compared to the control, these samplesÂ's conductivity was greater than 1500 uS/cm, the threshold at which a high salinity control sample should be used to calculate the test statistics. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500

	uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects, these samples are not counted as exceedances.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315JALxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42597, Toxicity **Region 3**

Jalama Creek

LOE ID:	24122
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42597, Toxicity **Region 3**

Jalama Creek

LOE ID:	24114
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41245 Region 3

Jalama Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 51 samples exceed the evaluation guideline (Shoup and Wahl 2009) used to interpret the Warm Freshwater Habitat water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 51 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41245, Turbidity Region 3

Jalama Creek

LOE ID:	14180
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41245, Turbidity **Region 3**

Jalama Creek

LOE ID:	50382
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass)

	growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41616 Region 3

Jalama Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Two of the 65 samples exceed the water quality objective for Agriculture, one of the 65 samples exceed the water quality objective for Warm Freshwater Habitats, and seven of the 65 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 65 samples exceed the water quality objective for Agriculture, one of the 65 samples exceed the water quality objective for Warm Freshwater Habitats, and seven of the 65 samples exceed the water quality objectives for Drinking Water and Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41616, pH Region 3

Jalama Creek

LOE ID:	12355
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 4 of 35 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	12395
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 8/4/2005-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	12357
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	12353
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	12377
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 8/4/2005-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	12394
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 8/4/2005-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	12393
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 8/4/2005-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	12376
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 8/4/2005-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	12354
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 4 of 35 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	12356
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	35
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Jalama Creek to determine beneficial use support and results are as follows: 4 of 35 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected over the time period 2/13/2001-11/1/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	50332
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	50341
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 3 of 26 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	50338
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 3 of 26 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	50371
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41616, pH **Region 3**

Jalama Creek

LOE ID:	50353
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Jalama Creek to determine beneficial use support and results are as follows: 3 of 26 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park]
Temporal Representation:	Data was collected over the time period 4/16/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40613**	**Region 3**
Jalama Creek		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40613, Anthracene **Region 3**

Jalama Creek

LOE ID:	15701
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40673** **Region 3**

Jalama Creek

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40673, Arsenic **Region 3**

Jalama Creek

LOE ID:	15788
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40567 Region 3

Jalama Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40567, Benzo(a)anthracene Region 3

Jalama Creek

LOE ID:	15842
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40566**	**Region 3**
Jalama Creek		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40566, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Jalama Creek

LOE ID:	15468
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40922** **Region 3**

Jalama Creek

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40922, Cadmium **Region 3**

Jalama Creek

LOE ID:	15569
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40537 Region 3
Jalama Creek

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40537, Chromium Region 3
Jalama Creek

LOE ID:	16011
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40551**	**Region 3**
Jalama Creek		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40551, Chrysene (C1-C4) **Region 3**

Jalama Creek

LOE ID:	15856
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40552** **Region 3**

Jalama Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40552, Copper **Region 3**

Jalama Creek

LOE ID:	15941
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40495 Region 3
Jalama Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40495, Dieldrin Region 3
Jalama Creek

LOE ID:	16632
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40575**	**Region 3**
Jalama Creek		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40575, Endrin **Region 3**

Jalama Creek

LOE ID:	16465
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40637** **Region 3**

Jalama Creek

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40637, Fluoranthene **Region 3**

Jalama Creek

LOE ID:	16550
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40612 Region 3
Jalama Creek

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40612, Fluorene Region 3
Jalama Creek

LOE ID:	16415
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41755**	**Region 3**
Jalama Creek		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41755, Lead **Region 3**

Jalama Creek

LOE ID:	17262
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41377** **Region 3**

Jalama Creek

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41377, Mercury **Region 3**

Jalama Creek

LOE ID:	17332
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41168 Region 3
Jalama Creek

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41168, Naphthalene Region 3
Jalama Creek

LOE ID:	17149
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41782**	**Region 3**
Jalama Creek		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41782, Nickel **Region 3**
Jalama Creek

LOE ID:	16982
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41601** **Region 3**
Jalama Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41601, Phenanthrene **Region 3**

Jalama Creek

LOE ID:	17069
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41602 Region 3
Jalama Creek

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41602, Pyrene Region 3
Jalama Creek

LOE ID:	16963
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41615**	**Region 3**
Jalama Creek		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41615, Zinc **Region 3**

Jalama Creek

LOE ID:	17848
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Jalama Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Jalama Creek was collected at 1 monitoring site [315JAL-Jalama Creek u/s County Park at Rail Road Trussels]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Canada De La Gaviota**
Water Body ID: **CAR3151003119990223115746**
Water Body Type: **River & Stream**

DECISION ID **33628** **Region 3**
Canada De La Gaviota

Pollutant: **Boron**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant (excluding LOE 1989 which is replaced by LOEs 10517 and 10481). Seventy-two of the 110 samples exceed the water quality objective. Note that LOE 1989 contained data from a two sites and data was collected between January 2001 and June 2006. LOEs 10481 LOE 0517 contain this data as well as additional data from August 2002 through December 2006. Therefore LOE 1989 is replaced and is not included in the sample counts summarized here to avoid double counting the same data.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy-two of the 110 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33628, Boron **Region 3**
Canada De La Gaviota

LOE ID: 10481

Pollutant: Boron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33628, Boron **Region 3**

Canada De La Gaviota

LOE ID:	49477
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33628, Boron **Region 3**

Canada De La Gaviota

LOE ID:	10517
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 36 of 50 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33628, Boron **Region 3**

Canada De La Gaviota

LOE ID:	49467
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 32 of 35 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33628, Boron **Region 3**

Canada De La Gaviota

LOE ID:	1989
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	32
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Fifteen out of 32 samples exceeded the water quality objective for agricultural water use/ irrigation supply for boron (CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Region 3 Basin Plan, Section II.A.2 Objectives for all inland surface waters, enclosed bay, and estuaries, page III-5). In Table 3-4 of the Basin Plan (page III-9), the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from two sites. Exceedances were detected in samples collected from both sites.
Temporal Representation:	Samples were collected from January 2001 to July 2002.
Environmental Conditions:	This water body is located in the South Coast hydrologic unit, Arguello hydrologic area, Arguello hydrologic subarea. The monitoring sites are located at Canada de la Gaviota at State Park Entrance (315GAV) and Canada de la Gaviota at Highway 1 (315GAI).
QAPP Information:	CCAMP and SWAMP QAPP.
QAPP Information Reference(s):	

DECISION ID	**37387**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eighty-nine of the 110 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eighty-nine of the 110 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37387, Chloride **Region 3**

Canada De La Gaviota

LOE ID:	49478
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 33 of 35 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37387, Chloride **Region 3**

Canada De La Gaviota

LOE ID:	10531

Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 39 of 50 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37387, Chloride **Region 3**

Canada De La Gaviota

LOE ID:	49479
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 10 of 12 samples

	exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37387, Chloride **Region 3**

Canada De La Gaviota

LOE ID:	10482
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37323** **Region 3**

Canada De La Gaviota

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 72 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of the 72 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37323, Escherichia coli (E. coli) **Region 3**

Canada De La Gaviota

LOE ID:	12314
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 6 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/5/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37323, Escherichia coli (E. coli) **Region 3**

Canada De La Gaviota

LOE ID:	12315
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/5/2005-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37323, Escherichia coli (E. coli) **Region 3**

Canada De La Gaviota

LOE ID:	49937
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 5 of 35 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 37323, Escherichia coli (E. coli) **Region 3**

Canada De La Gaviota

LOE ID:	49938
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37256** **Region 3**

Canada De La Gaviota

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing

status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Twenty-eight of the 112 samples exceed the water quality objective for water contact recreation (i.e. swimming, wading etc.) but only 2 of the 112 sample also exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-eight of the 112 samples exceed the water quality objective for water contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37256, Fecal Coliform **Region 3**

Canada De La Gaviota

LOE ID:	49935
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 7 of 35 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37256, Fecal Coliform **Region 3**

Canada De La Gaviota

LOE ID:	49957
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37256, Fecal Coliform **Region 3**

Canada De La Gaviota

LOE ID:	49958
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37256, Fecal Coliform **Region 3**

Canada De La Gaviota

LOE ID:	49936
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37256, Fecal Coliform **Region 3**

Canada De La Gaviota

LOE ID:	12278
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 12 of 53 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37256, Fecal Coliform **Region 3**

Canada De La Gaviota

LOE ID:	12203
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37256, Fecal Coliform **Region 3**

Canada De La Gaviota

LOE ID:	12279

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	53
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 2 of 53 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37256, Fecal Coliform **Region 3**

Canada De La Gaviota

LOE ID:	12204
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37155**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. A total of 105 of the 110 samples exceed the Water Quality Objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 105 of the 110 samples exceed the Water Quality Objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37155, Sodium **Region 3**

Canada De La Gaviota

LOE ID:	10549
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 47 of 50 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37155, Sodium **Region 3**

Canada De La Gaviota

LOE ID:	10498
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 13 of 13 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37155, Sodium **Region 3**

Canada De La Gaviota

LOE ID:	49824
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 34 of 35 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37155, Sodium **Region 3**

Canada De La Gaviota

LOE ID:	49825
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]

Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37551** **Region 3**

Canada De La Gaviota

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11281) and total ammonia (Decision 11286). This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which 2 of the 112 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Four LOE summarizes total ammonia data and zero of the 115 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 112 unionized ammonia results exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life but, zero of the 115 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	49840
Pollutant:	Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	10480
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	49826
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	10516
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 2 of 53 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	10515
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 2 of 53 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	10514
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health

	Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	10466
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	10465
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	49673
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	49672
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37551, Ammonia **Region 3**

Canada De La Gaviota

LOE ID:	49897
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37551, Ammonia — Region 3

Canada De La Gaviota

LOE ID:	49896
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47037 — Region 3

Canada De La Gaviota

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a

water or sediment concentration of pollutants is necessary if there is evidence that the benthic community is degraded (i.e. more than 2 samples have poor index scores).

One line of evidence is available in the administrative record to assess this indicator. One of the 4 scores for this water body has a CSCI score below 0.79 (indicating poor community composition) and therefore exceeded the evaluation guideline (Rehn, et al. 2015) used to interpret the narrative water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 4 scores for this water body has a CSCI score below 0.79 which indicates poor benthic invertebrate community composition for this area but this does not meet the requirements of section 3.9 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs). When scores from the two BMI indices (CSCI and Regional IBI) conflict in the overall assessment, CSCI scores will be used over IBI scores. The CSCI is more appropriate to use as it is an advancement over the regional IBIs. Additionally, the CSCI provides multiple lines of evidence, incorporating measures of species composition and ecological traits into a single condition score.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47037, Benthic Community Effects **Region 3**

Canada De La Gaviota

LOE ID:	79403
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the 4 scores for this water body has a CSCI score below 0.79. The CSCI scores for this site are 0.939848699, 0.916706637, 0.96652921, and 0.516754821199945.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results. CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have impaired aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 315GAVxxx-Canada de la Gaviota at State Park entrance
Temporal Representation:	Surveys done in the month of April years 2005, 2007, and 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47037, Benthic Community Effects **Region 3**

Canada De La Gaviota

LOE ID:	53807
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the three of the IBI scores is 39 or below and are therefore are below the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in this waterbody resulting in the collection of more than one sample at the Gaviota Creek station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the 2007 sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The three RWB samples included in this assessment have the following IBI scores: The 2005 sample IBI score was 30, the 2007 sample IBI score was 43 and the 2008 sample IBI score was 44.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13

Spatial Representation:	Surveys done at the following station: 315GAVxxx-Canada de la Gaviota at State Park entrance
Temporal Representation:	Surveys done on April 27, 2005 and April 5, 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47037, Benthic Community Effects **Region 3**

Canada De La Gaviota

LOE ID:	53806
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The survey scored above 40 on the IBI, which means this water body would not be considered to have impaired conditions based on the bioassessment.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce significant alterations in population or community ecology or receiving water biota. In addition, the health and life history characteristics of aquatic organisms in waters affected by controllable water quality factors shall not differ significantly from those for the same waters in areas unaffected by controllable water quality factors.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Index of Biological Integrity (IBI) is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Sampling was done at to following station: 315GAIxxx-Canada de la Gaviota at Highway 1
Temporal Representation:	Sampling was done on May 7, 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the project titled 'Central Coast Ambient Monitoring Program (Santa Barbara Rotation Bioassessment 2008)' following SWAMP protocols and data were stored in the SWAMP database.
QAPP Information Reference(s):	

DECISION ID **42826** **Region 3**

Canada De La Gaviota

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One of the 110 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 110 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42826, Chlorophyll-a **Region 3**

Canada De La Gaviota

LOE ID:	10499
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42826, Chlorophyll-a **Region 3**

Canada De La Gaviota

LOE ID:	10500
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface

	water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42826, Chlorophyll-a **Region 3**

Canada De La Gaviota

LOE ID:	49827
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42826, Chlorophyll-a **Region 3**

Canada De La Gaviota

LOE ID:	49841
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 34 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42826, Chlorophyll-a **Region 3**

Canada De La Gaviota

LOE ID:	10532
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42826, Chlorophyll-a **Region 3**

Canada De La Gaviota

LOE ID:	10533
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42826, Chlorophyll-a **Region 3**

Canada De La Gaviota

LOE ID:	49842
Pollutant:	Chlorophyll-a

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42826, Chlorophyll-a **Region 3**

Canada De La Gaviota

LOE ID:	49674
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 34 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42875**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of zero water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). Four water samples will not be used in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single sediment sample (pore

water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). The single sediment sample exceeded the aquatic life water quality objective however this sample will not be included in the exceedance count because the criteria used are specific to water samples, not sediment pore water. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42875, Chlorpyrifos **Region 3**

Canada De La Gaviota

LOE ID:	16120
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42875, Chlorpyrifos **Region 3**

Canada De La Gaviota

LOE ID:	47740
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier

et al., 2005).

Spatial Representation:	Data for this line of evidence for Canada De La Gaviota was collected at 1 monitoring site [Canada de la Gaviota at State Park entrance - 315GAVxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42875, Chlorpyrifos **Region 3**

Canada De La Gaviota

LOE ID:	47720
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Canada De La Gaviota was collected at 1 monitoring site [Canada de la Gaviota at State Park entrance - 315GAVxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42875, Chlorpyrifos **Region 3**

Canada De La Gaviota

LOE ID:	16107

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42875, Chlorpyrifos **Region 3**

Canada De La Gaviota

LOE ID:	16023
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42875, Chlorpyrifos **Region 3**

Canada De La Gaviota

LOE ID:	16022
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42876**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of two sediment samples (pore water) did not exceed the evaluation guideline (Finlayson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the four samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The exceedance count does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42876, Diazinon **Region 3**

Canada De La Gaviota

LOE ID:	47659
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Canada De La Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada De La Gaviota was collected at 1 monitoring site [Canada de la Gaviota at State Park entrance - 315GAVxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42876, Diazinon **Region 3**

Canada De La Gaviota

LOE ID:	16801

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42876, Diazinon **Region 3**

Canada De La Gaviota

LOE ID:	16800
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42876, Diazinon **Region 3**

Canada De La Gaviota

LOE ID:	16661
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3

	Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42876, Diazinon **Region 3**

Canada De La Gaviota

LOE ID:	16719
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42876, Diazinon **Region 3**

Canada De La Gaviota

LOE ID:	47674
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Canada De La Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada De La Gaviota was collected at 1 monitoring site [Canada de la Gaviota at State Park entrance - 315GAVxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	37257	Region 3
Canada De La Gaviota		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Zero of the 115 nitrate samples exceed the water quality objectives for Agricultural Supply and Drinking Water. Two of the 48 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 115 nitrate/nitrite samples exceed the water quality objectives for Agricultural Supply and Drinking Water. Two of the 48 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. There is no evidence that nitrate or nitrate/nitrite are causing eutrophication in this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 115 samples exceed the water quality objectives for Agricultural Supply and Drinking Water. Two of 48 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37257, Nitrate	**Region 3**
Canada De La Gaviota	

LOE ID:	49914
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples

	exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49915
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49916
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49913
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49830
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region

	IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49829
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49828
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49507
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49494
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples

	exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	10497
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49492
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate — Region 3

Canada De La Gaviota

LOE ID:	49493
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate — Region 3

Canada De La Gaviota

LOE ID:	10534
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	10548
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not

	contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	10483
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/27/2002. Santa Barbara Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49844
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49860
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49858
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49859
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37257, Nitrate **Region 3**

Canada De La Gaviota

LOE ID:	49843
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53537 Region 3

Canada De La Gaviota

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 48 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 48 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53537, Nitrogen, Nitrite Region 3

Canada De La Gaviota

LOE ID:	49508

Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53537, Nitrogen, Nitrite **Region 3**

Canada De La Gaviota

LOE ID:	49509
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37273**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Three of 123 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and 1 of the 123 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats. . Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 123 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 1 of the 123 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	13166
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	13167
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	13214
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 53 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	13168
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	13169
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	13186
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 6 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	14078
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 53 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	14079
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 53 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	14096
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 53 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	13184
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	13185
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 6 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	13183
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	49846
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	49847
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	35
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 3 of 35 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	49848
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]

Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	49845
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	49877
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	49876
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 3 of 35 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	49862
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37273, Oxygen, Dissolved **Region 3**

Canada De La Gaviota

LOE ID:	49861
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37942**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and the sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 123 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 123 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37942, Specific Conductivity **Region 3**

Canada De La Gaviota

LOE ID:	49480
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37942, Specific Conductivity **Region 3**

Canada De La Gaviota

LOE ID:	49491
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37942, Specific Conductivity **Region 3**

Canada De La Gaviota

LOE ID:	12280
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37942, Specific Conductivity **Region 3**

Canada De La Gaviota

LOE ID:	12242
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37942, Specific Conductivity **Region 3**

Canada De La Gaviota

LOE ID:	12220
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37491** **Region 3**

Canada De La Gaviota

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 123 samples exceed the evaluation guideline (Moyle 1976) set to protect for steelhead trout. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of the 123 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37491, Temperature, water **Region 3**

Canada De La Gaviota

LOE ID:	13132
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37491, Temperature, water **Region 3**

Canada De La Gaviota

LOE ID:	14097
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 7 of 53 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37491, Temperature, water **Region 3**

Canada De La Gaviota

LOE ID:	14077
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37491, Temperature, water **Region 3**

Canada De La Gaviota

LOE ID:	49895
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37491, Temperature, water **Region 3**

Canada De La Gaviota

LOE ID:	49894
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la

	Gaviota to determine beneficial use support and results are as follows: 7 of 35 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42823**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Four LOEs summarizes sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in sediment samples. Zero of the two sediment samples resulted in a significant toxic effect to one or more test organisms. Six LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and four additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in water samples. One of the eight water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 8 water samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42823, Toxicity **Region 3**

Canada De La Gaviota

LOE ID:	78419
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315GAV - at Gaviota State Park entrance
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42823, Toxicity — Region 3

Canada De La Gaviota

LOE ID:	53808
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 315GAV - at Gaviota State Park entrance
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42823, Toxicity — Region 3

Canada De La Gaviota

LOE ID:	53814
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Two of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count and Ceriodaphnia dubia young. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Both of the samples exhibited significant toxicity to Selenastrum capricornutum but had no significant effects to either Ceriodaphnia dubia, or Pimephales promelas. The significant effects to Selenastrum are not counted as an exceedance here because the conductivity of the sample water was above the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. The conductivity in both samples was greater than 1500 uS/cm but the significance of the toxic effect was not calculated using the high salinity control sample and therefore is not counted as an exceedance.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315GAIxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42823, Toxicity **Region 3**

Canada De La Gaviota

LOE ID:	53813
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell

count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Both of the samples exhibited significant toxicity to Selenastrum capricornutum but had no significant effects to either Ceriodaphnia dubia, or Pimephales promelas. The significant effects to Selenastrum are not counted as an exceedance here because the conductivity of the sample water was above the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. The conductivity in both samples was greater than 1500 uS/cm but the significance of the toxic effect was not calculated using the high salinity control sample and therefore is not counted as an exceedance.

Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315GAV - at the Gaviota State Park entrance.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42823, Toxicity **Region 3**

Canada De La Gaviota

LOE ID:	23714
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less

	than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42823, Toxicity **Region 3**

Canada De La Gaviota

LOE ID:	23737
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42823, Toxicity **Region 3**

Canada De La Gaviota

LOE ID:	23719
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAV-Canada de la Gaviota at State Park entrance, 315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42823, Toxicity **Region 3**

Canada De La Gaviota

LOE ID:	23718
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAV-Canada de la Gaviota at State Park entrance, 315GAI-Canada de la Gaviota at Highway 1].
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring

	includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42823, Toxicity **Region 3**

Canada De La Gaviota

LOE ID:	23720
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42823, Toxicity **Region 3**

Canada De La Gaviota

LOE ID:	23721
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42825**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Eight of the 110 samples exceed the evaluation guideline (Sigler et al. 1984) used to interpret the Cold Freshwater Habitat water quality objective and 8 of the 110 samples exceed the evaluation guideline (Shoup and Wahl 2009) used to interpret the Warm Freshwater Habitat water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 110 samples exceed the evaluation guidelines but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	13131
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	13216
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 3 of 44 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	14075
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	14076
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	13217
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 3 of 44 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	13130
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	49865
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	49864
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 3 of 34 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	49880
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 3 of 34 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42825, Turbidity **Region 3**

Canada De La Gaviota

LOE ID:	49881
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38013** **Region 3**

Canada De La Gaviota

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Three of the 123 samples exceed the water quality objectives for drinking water and recreation and zero of the 123 samples exceed the water quality objectives for Agricultural Supply, Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 123 samples exceed the water quality objectives for drinking water and recreation and zero of the 123 samples exceed the water quality objectives for Agricultural Supply, Cold and Warm Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49917
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]

Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49510
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49823

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12239
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12221
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]

Temporal Representation: Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID: 12222

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 12

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]

Temporal Representation: Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12240
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12241
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12243
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12223
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12259
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12260
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling

	(DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12261
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [

	315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12262
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12263
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 2 monitoring sites [315GAI-Canada de la Gaviota at Highway 1, 315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 7/16/2001-8/9/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12295
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12296
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 53 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12297
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 53 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12298
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 53 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12299
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	12281
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/5/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49959
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49956
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49955
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49934
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49879
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49878
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49960
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49849
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected over the time period 1/3/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38013, pH **Region 3**

Canada De La Gaviota

LOE ID:	49863
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAI-Canada de la Gaviota at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41961 **Region 3**

Canada De La Gaviota

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41961, Anthracene **Region 3**

Canada De La Gaviota

LOE ID:	15802
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001)

	data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41961, Anthracene **Region 3**

Canada De La Gaviota

LOE ID:	15803
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41961, Anthracene **Region 3**

Canada De La Gaviota

LOE ID:	15832
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41961, Anthracene **Region 3**

Canada De La Gaviota

LOE ID:	15819
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37916** **Region 3**

Canada De La Gaviota

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) set to protect for Cold and Warm

Freshwater Habitat.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) set to protect for Cold and Warm Freshwater Habitat and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37916, Arsenic **Region 3**

Canada De La Gaviota

LOE ID:	15630
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37916, Arsenic **Region 3**

Canada De La Gaviota

LOE ID:	15629
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37916, Arsenic **Region 3**

Canada De La Gaviota

LOE ID:	15613
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37916, Arsenic **Region 3**

Canada De La Gaviota

LOE ID:	15612
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42014**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42014, Benzo(a)anthracene — Region 3

Canada De La Gaviota

LOE ID:	15482
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42014, Benzo(a)anthracene — Region 3

Canada De La Gaviota

LOE ID:	15498
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42014, Benzo(a)anthracene **Region 3**

Canada De La Gaviota

LOE ID:	15511
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42014, Benzo(a)anthracene **Region 3**

Canada De La Gaviota

LOE ID:	15481
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41962	Region 3
Canada De La Gaviota		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41962, Benzo(a)pyrene (3,4-Benzopyrene -7-d)	**Region 3**
Canada De La Gaviota	

LOE ID:	15566
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41962, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Canada De La Gaviota

LOE ID:	15579
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [

	315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41962, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Canada De La Gaviota

LOE ID:	15360
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41962, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Canada De La Gaviota

LOE ID:	15359

Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38024	Region 3
Canada De La Gaviota		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial

uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38024, Cadmium **Region 3**

Canada De La Gaviota

LOE ID:	15428
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38024, Cadmium **Region 3**

Canada De La Gaviota

LOE ID:	15427
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38024, Cadmium **Region 3**

Canada De La Gaviota

LOE ID:	15444
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38024, Cadmium **Region 3**

Canada De La Gaviota

LOE ID:	15445
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37377**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37377, Chromium — Region 3

Canada De La Gaviota

LOE ID:	15886
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37377, Chromium — Region 3

Canada De La Gaviota

LOE ID:	15902
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37377, Chromium **Region 3**

Canada De La Gaviota

LOE ID:	15903
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37377, Chromium **Region 3**

Canada De La Gaviota

LOE ID:	15885
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41959	Region 3
Canada De La Gaviota		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41959, Chrysene (C1-C4)	**Region 3**
Canada De La Gaviota	

LOE ID:	15955
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41959, Chrysene (C1-C4) Region 3

Canada De La Gaviota

LOE ID:	15864
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [

	315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41959, Chrysene (C1-C4) **Region 3**

Canada De La Gaviota

LOE ID:	15954
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41959, Chrysene (C1-C4) **Region 3**

Canada De La Gaviota

LOE ID:	15970

Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38117**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial

uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38117, Copper **Region 3**

Canada De La Gaviota

LOE ID:	16797
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38117, Copper **Region 3**

Canada De La Gaviota

LOE ID:	16796
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38117, Copper **Region 3**

Canada De La Gaviota

LOE ID:	15880
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38117, Copper **Region 3**

Canada De La Gaviota

LOE ID:	15867
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41969**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41969, Dieldrin — Region 3

Canada De La Gaviota

LOE ID:	16495
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41969, Dieldrin — Region 3

Canada De La Gaviota

LOE ID:	16729
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41969, Dieldrin **Region 3**

Canada De La Gaviota

LOE ID:	16496
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41969, Dieldrin **Region 3**

Canada De La Gaviota

LOE ID:	16730
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41966	Region 3
Canada De La Gaviota		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41966, Endrin	**Region 3**
Canada De La Gaviota	

LOE ID:	16562
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41966, Endrin **Region 3**

Canada De La Gaviota

LOE ID:	16579
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [

	315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41966, Endrin **Region 3**

Canada De La Gaviota

LOE ID:	16578
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41966, Endrin **Region 3**

Canada De La Gaviota

LOE ID:	16561

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41967**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial

uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41967, Fluoranthene **Region 3**

Canada De La Gaviota

LOE ID:	16394
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41967, Fluoranthene **Region 3**

Canada De La Gaviota

LOE ID:	16412
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41967, Fluoranthene **Region 3**

Canada De La Gaviota

LOE ID:	16411
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41967, Fluoranthene **Region 3**

Canada De La Gaviota

LOE ID:	16395
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41968**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41968, Fluorene — Region 3

Canada De La Gaviota

LOE ID:	17276
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41968, Fluorene — Region 3

Canada De La Gaviota

LOE ID:	17293
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41968, Fluorene **Region 3**

Canada De La Gaviota

LOE ID:	17292
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41968, Fluorene **Region 3**

Canada De La Gaviota

LOE ID:	17275
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38118	Region 3
Canada De La Gaviota		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38118, Lead	**Region 3**
Canada De La Gaviota	

LOE ID:	17138
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38118, Lead **Region 3**

Canada De La Gaviota

LOE ID:	17377
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [

	315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38118, Lead **Region 3**

Canada De La Gaviota

LOE ID:	17361
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38118, Lead **Region 3**

Canada De La Gaviota

LOE ID:	17360

Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37882**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial

uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37882, Mercury **Region 3**

Canada De La Gaviota

LOE ID:	17174
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37882, Mercury **Region 3**

Canada De La Gaviota

LOE ID:	17192
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37882, Mercury **Region 3**

Canada De La Gaviota

LOE ID:	17191
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37882, Mercury **Region 3**

Canada De La Gaviota

LOE ID:	17175
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**44286**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44286, Naphthalene — Region 3

Canada De La Gaviota

LOE ID:	17012
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44286, Naphthalene — Region 3

Canada De La Gaviota

LOE ID:	17011
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44286, Naphthalene **Region 3**

Canada De La Gaviota

LOE ID:	17027
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44286, Naphthalene **Region 3**

Canada De La Gaviota

LOE ID:	17026
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	37944	Region 3
Canada De La Gaviota		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37944, Nickel	**Region 3**
Canada De La Gaviota	

LOE ID:	17078
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37944, Nickel **Region 3**

Canada De La Gaviota

LOE ID:	17096
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [

	315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37944, Nickel **Region 3**

Canada De La Gaviota

LOE ID:	17095
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37944, Nickel **Region 3**

Canada De La Gaviota

LOE ID:	17079

Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42332	Region 3
Canada De La Gaviota		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial

uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42332, Phenanthrene **Region 3**

Canada De La Gaviota

LOE ID:	16992
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42332, Phenanthrene **Region 3**

Canada De La Gaviota

LOE ID:	16991
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42332, Phenanthrene **Region 3**

Canada De La Gaviota

LOE ID:	16975
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42332, Phenanthrene **Region 3**

Canada De La Gaviota

LOE ID:	16974
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42333**	**Region 3**
Canada De La Gaviota		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42333, Pyrene — Region 3

Canada De La Gaviota

LOE ID:	17881
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42333, Pyrene — Region 3

Canada De La Gaviota

LOE ID:	17862
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42333, Pyrene **Region 3**

Canada De La Gaviota

LOE ID:	17896
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42333, Pyrene **Region 3**

Canada De La Gaviota

LOE ID:	17863
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	37481	Region 3
Canada De La Gaviota		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37481, Zinc	**Region 3**
Canada De La Gaviota	

LOE ID:	17686
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37481, Zinc **Region 3**

Canada De La Gaviota

LOE ID:	17955
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [

	315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37481, Zinc **Region 3**

Canada De La Gaviota

LOE ID:	17704
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37481, Zinc **Region 3**

Canada De La Gaviota

LOE ID:	17703

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada de la Gaviota to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Canada de la Gaviota was collected at 1 monitoring site [315GAV-Canada de la Gaviota at State Park entrance]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Canada Del Refugio**
Water Body ID: **CAR3151002219990223132423**
Water Body Type: **River & Stream**

DECISION ID **37706** **Region 3**
Canada Del Refugio

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-three of the 28 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-three of the 28 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37706, Chloride **Region 3**
Canada Del Refugio

LOE ID: 10519

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	16
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 13 of 16 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37706, Chloride **Region 3**

Canada Del Refugio

LOE ID:	49852
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37160**	**Region 3**
Canada Del Refugio		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Seven of the 27 samples exceed the water quality objective for water contact recreation, but zero of the 27 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 27 samples exceed the water quality objective for water contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37160, Fecal Coliform — Region 3

Canada Del Refugio

LOE ID:	49948
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37160, Fecal Coliform — Region 3

Canada Del Refugio

LOE ID:	49945
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37160, Fecal Coliform **Region 3**

Canada Del Refugio

LOE ID:	12457
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37160, Fecal Coliform **Region 3**

Canada Del Refugio

LOE ID:	12441
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	38103	Region 3
Canada Del Refugio		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of the 28 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-five of the 28 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38103, Sodium	**Region 3**
Canada Del Refugio	

LOE ID:	10537
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 14 of 16 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]

Temporal Representation: Data was collected over the time period 1/18/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38103, Sodium **Region 3**

Canada Del Refugio

LOE ID: 49886

Pollutant: Sodium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 12
Number of Exceedances: 11

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Sodium.

Data Reference: Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.

Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37380 Region 3

Canada Del Refugio

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11329) and total ammonia (Decision 11331). This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 28 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarizes total ammonia data and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. zero of the samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37380, Ammonia Region 3

Canada Del Refugio

LOE ID: 49967

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37380, Ammonia **Region 3**

Canada Del Refugio

LOE ID:	49887
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37380, Ammonia **Region 3**

Canada Del Refugio

LOE ID:	10504
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37380, Ammonia **Region 3**

Canada Del Refugio

LOE ID:	10502
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37380, Ammonia **Region 3**

Canada Del Refugio

LOE ID:	10503
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37380, Ammonia **Region 3**

Canada Del Refugio

LOE ID:	49924
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47058**	**Region 3**
Canada Del Refugio		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and of the Listing Policy. Under section 3.9, data from at least two stations showing the benthic community is impacted and an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample had a CSCI score above 0.79 and therefore did not exceed the evaluation guideline used to interpret the narrative water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Section 3.9 of the Listing Policy requires data from at least two stations. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. Additional data is needed to determine whether or not the beneficial use is supported. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

	The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs).
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 47058, Benthic Community Effects **Region 3**

Canada Del Refugio

LOE ID:	79149
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is 1.02134404340669. This site is above the 0.79 threshold, indicating that the aquatic life beneficial use is supported.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health.Â The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded biological condition) to greater than 1 (healthy biological condition and equivalent to reference).Â CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact healthy biological condition, 0.91 to 0.80 = possibly altered degraded biological condition, 0.79 to 0.63 = likely altered degraded biological condition, less than or equal to 0.62 = very likely altered degraded biological condition.Â Sites with scores below 0.79 are considered to have exceeded the water quality objective impaired for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 315RSBxxx-Canada del Refugio above Highway 101
Temporal Representation:	Surveys done on May 7, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47058, Benthic Community Effects **Region 3**

Canada Del Refugio

LOE ID:	53821

Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was 40 or above and therefore is not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315RSBxxx-Canada del Refugio above Highway 101
Temporal Representation:	Surveys done on May 7, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

DECISION ID	**38087**	**Region 3**
Canada Del Refugio		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38087, Boron **Region 3**

Canada Del Refugio

LOE ID:	49851
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38087, Boron **Region 3**

Canada Del Refugio

LOE ID:	10518

Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40559**	**Region 3**
Canada Del Refugio		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 27 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40559, Chlorophyll-a **Region 3**

Canada Del Refugio

LOE ID:	10521
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40559, Chlorophyll-a **Region 3**

Canada Del Refugio

LOE ID:	10520
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [

	315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40559, Chlorophyll-a **Region 3**

Canada Del Refugio

LOE ID:	49888
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 40559, Chlorophyll-a **Region 3**

Canada Del Refugio

LOE ID:	49968
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47059** **Region 3**

Canada Del Refugio

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Four of the 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47059, Escherichia coli (E. coli) **Region 3**

Canada Del Refugio

LOE ID:	49946
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37161	Region 3
Canada Del Refugio		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 nitrate samples exceed the water quality objectives for the Agricultural Supply and Drinking Water beneficial uses. Four of the 13 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Agricultural Supply and Drinking Water. Three of the 12 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. Insufficient evidence was found to support nitrate as a cause of impairment for Cold or Warm Freshwater habitats: 1) Dissolved oxygen for this water body ranged from 5.25 mg/L to 14.9 mg/L, occasionally exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Floating mats ranged from 0 to 70 % cover, occasionally exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3) Water column chlorophyll a concentration ranged from 0.1 to 8.9 ug/L, never exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 2.34 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). 5) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 56 g/m2 ash-free dry weight (AFDW). This does not exceed the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 or the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006). 6) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 139 mg/m2. This does not exceed the Cold Freshwater Habitat screening threshold of 150 mg/m2 or the Warm water screening threshold of 200 mg/m2 (Creager, et al., 2006). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 29 nitrate samples exceed the water quality objectives for the Agricultural Supply and Drinking Water beneficial uses. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Agricultural Supply and Drinking Water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. In addition, there is Insufficient evidence to support nitrate as a cause of impairment for Cold or Warm Freshwater habitats.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	49889
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	49680
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	49927
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	49868
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	49869
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	49926
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	49969
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	10536
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	49903
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37161, Nitrate **Region 3**

Canada Del Refugio

LOE ID:	10535
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	53539	Region 3
Canada Del Refugio		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 13 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53539, Nitrogen, Nitrite	**Region 3**
Canada Del Refugio	

LOE ID:	49870
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the

	criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37962**	**Region 3**
Canada Del Refugio		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Zero of 31 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and zero of the 31 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats and the dissolved oxygen levels are supporting those beneficial uses. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 31 samples exceeded the Cold and Warm Freshwater Habitat water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	49681
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	49682
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	14099
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	14100
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved — Region 3

Canada Del Refugio

LOE ID:	14185
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved — Region 3

Canada Del Refugio

LOE ID:	14184
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	14164
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	14183
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	14182
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	14114
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for

	Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	49905
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37962, Oxygen, Dissolved **Region 3**

Canada Del Refugio

LOE ID:	49904
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37954** **Region 3**

Canada Del Refugio

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Five of the 31 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 31 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37954, Specific Conductivity **Region 3**

Canada Del Refugio

LOE ID:	12458
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37954, Specific Conductivity **Region 3**

Canada Del Refugio

LOE ID:	12478
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37954, Specific Conductivity **Region 3**

Canada Del Refugio

LOE ID:	49853
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38104** **Region 3**

Canada Del Refugio

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 31 samples exceed the exceed the relevant evaluation guideline (Moyle 1976) used to interpret the narrative water quality objective for temperature and aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 31 samples exceed the exceed the relevant evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38104, Temperature, water **Region 3**

Canada Del Refugio

LOE ID:	14206
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [

	315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38104, Temperature, water **Region 3**

Canada Del Refugio

LOE ID:	14181
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38104, Temperature, water **Region 3**

Canada Del Refugio

LOE ID:	49923
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41951**	**Region 3**
Canada Del Refugio		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Five LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and

two additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in water samples. One of the four water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 4 samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41951, Toxicity **Region 3**

Canada Del Refugio

LOE ID:	23743
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41951, Toxicity **Region 3**

Canada Del Refugio

LOE ID:	23744
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41951, Toxicity **Region 3**

Canada Del Refugio

LOE ID:	23747
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada del Refugio to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101].
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41951, Toxicity **Region 3**

Canada Del Refugio

LOE ID:	23748
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada del Refugio to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101].
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41951, Toxicity **Region 3**

Canada Del Refugio

LOE ID:	53822
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). Both of the samples resulted in significant toxicity to Selenastrum capricornutum but had no significant effects to either Ceriodaphnia dubia, or Pimephales promelas. The significant effects to Selenastrum are not counted as an exceedance here because the conductivity of the sample water was above the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. The conductivity in both samples was greater than 1500 uS/cm but the significance of the toxic effect was not calculated using the high salinity control sample and therefore is not counted as an exceedance.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315RSBxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID	**41856**	**Region 3**
Canada Del Refugio		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One of the 32 samples exceed the exceed the relevant evaluation guidelines (Sigler et al., 1984) used to interpret the water quality objective for turbidity and aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 32 samples exceed the exceed the relevant evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41856, Turbidity **Region 3**

Canada Del Refugio

LOE ID:	49684
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41856, Turbidity **Region 3**

Canada Del Refugio

LOE ID:	14205
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41856, Turbidity **Region 3**

Canada Del Refugio

LOE ID:	49907
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41856, Turbidity **Region 3**

Canada Del Refugio

LOE ID:	14204
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41856, Turbidity **Region 3**

Canada Del Refugio

LOE ID:	14117
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41856, Turbidity **Region 3**

Canada Del Refugio

LOE ID:	14116
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38042** **Region 3**

Canada Del Refugio

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 31 samples exceed the water quality objectives for Agricultural Supply, Drinking Water, Recreation Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 31 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12477
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]

Temporal Representation: Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID: 12174

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]

Temporal Representation: Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12173
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12459
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12191
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12474
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	49906

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12460
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12172
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12171
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12476
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12175
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	12475
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	49683
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	49871
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the

	criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	49944
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	49947
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38042, pH **Region 3**

Canada Del Refugio

LOE ID:	49949
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41846** **Region 3**

Canada Del Refugio

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use the two samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic

	life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41846, Chlorpyrifos **Region 3**

Canada Del Refugio

LOE ID:	16168
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41846, Chlorpyrifos **Region 3**

Canada Del Refugio

LOE ID:	16155
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41847** **Region 3**

Canada Del Refugio

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41847, Diazinon **Region 3**

Canada Del Refugio

LOE ID:	16850
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41847, Diazinon **Region 3**

Canada Del Refugio

LOE ID:	16851
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Canada del Refugio to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Canada del Refugio was collected at 1 monitoring site [315RSB-Canada del Refugio u/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Canada Del Capitan**
Water Body ID: **CAR3151002019990223121922**
Water Body Type: **River & Stream**

DECISION ID **38037** **Region 3**
Canada Del Capitan

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11329) and total ammonia (Decision 11331). This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 28 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarizes total ammonia data and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.
This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38037, Ammonia **Region 3**
Canada Del Capitan

LOE ID: 49901

Pollutant: Ammonia (Unionized)
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38037, Ammonia **Region 3**

Canada Del Capitan

LOE ID:	49678
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia

	(NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38037, Ammonia **Region 3**

Canada Del Capitan

LOE ID:	49941
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 38037, Ammonia **Region 3**

Canada Del Capitan

LOE ID:	9653
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38037, Ammonia **Region 3**

Canada Del Capitan

LOE ID:	9654
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38037, Ammonia **Region 3**

Canada Del Capitan

LOE ID:	9652
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).

Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47054**	**Region 3**
Canada Del Capitan		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary if there is evidence that the benthic community is degraded (i.e. more than 2 samples have poor index scores). One line of evidence is available in the administrative record to assess this indicator. The single sample did not have an Index score below 39 (indicating poor community composition) and therefore did not exceed the evaluation guideline (Ode et al. 2005) used to interpret the narrative water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not have an Index score below 39 (indicating poor community composition). However, this is not enough information to determine whether or not the water quality objective has been exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47054, Benthic Community Effects **Region 3**

Canada Del Capitan

LOE ID:	53815
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The average of the two duplicate IBI scores is above 39 and therefore the sample does not indicate benthic macro-invertebrate community impairment as defined by the Southern California IBI. In 2005, two samples were collected from the same site in Canada del Capitan. These samples are designated as field duplicates and so the results are averaged. The average IBI score for this sample is 41.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315CAPxxx-El Capitan Creek below Highway 101
Temporal Representation:	Surveys done on May 8, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

DECISION ID **38008** **Region 3**

Canada Del Capitan

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38008, Boron **Region 3**

Canada Del Capitan

LOE ID:	49866
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38008, Boron **Region 3**

Canada Del Capitan

LOE ID:	9655
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37379** **Region 3**

Canada Del Capitan

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37379, Chloride **Region 3**

Canada Del Capitan

LOE ID:	9668
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37379, Chloride **Region 3**

Canada Del Capitan

LOE ID:	49867
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41904	Region 3
Canada Del Capitan		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41904, Chlorophyll-a	**Region 3**
Canada Del Capitan	

LOE ID:	49679
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41904, Chlorophyll-a **Region 3**

Canada Del Capitan

LOE ID:	9669
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41904, Chlorophyll-a **Region 3**

Canada Del Capitan

LOE ID:	49902
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41904, Chlorophyll-a **Region 3**

Canada Del Capitan

LOE ID:	9670
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]

Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47055 **Region 3**

Canada Del Capitan

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the USEPA Ambient Water Quality Criteria for Bacteria. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the USEPA Ambient Water Quality Criteria for Bacteria and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47055, Escherichia coli (E. coli) **Region 3**

Canada Del Capitan

LOE ID:	49964
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38004**	**Region 3**
Canada Del Capitan		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 27 samples exceed the water quality objective for water contact recreation (e.g. swimming) but zero of the 27 samples exceed the water quality objective for non-contact recreation (e.g. boating). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 27 samples exceed the water quality objective for water contact recreation (e.g. swimming) but zero of the 27 samples exceed the water quality objective for non-contact recreation (e.g. boating) and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38004, Fecal Coliform **Region 3**

Canada Del Capitan

LOE ID:	49675
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38004, Fecal Coliform **Region 3**

Canada Del Capitan

LOE ID:	49963
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38004, Fecal Coliform **Region 3**

Canada Del Capitan

LOE ID:	11315
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38004, Fecal Coliform **Region 3**

Canada Del Capitan

LOE ID:	11316
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37994 Region 3

Canada Del Capitan

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 nitrate samples exceed the water quality objectives for Agricultural Supply and Drinking Water. One of the 13 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 13 nitrate/nitrite samples exceed the water quality objectives for Agricultural Supply and Drinking Water. One of the 13 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. There is no evidence that nitrate or nitrate/nitrite are causing eutrophication in this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 29 samples exceed the water quality objectives for Agricultural Supply and Drinking Water. One of 13 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37994, Nitrate Region 3

Canada Del Capitan

LOE ID:	9671
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37994, Nitrate **Region 3**

Canada Del Capitan

LOE ID:	49918
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37994, Nitrate **Region 3**

Canada Del Capitan

LOE ID:	49919
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37994, Nitrate **Region 3**

Canada Del Capitan

LOE ID:	49832
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37994, Nitrate **Region 3**

Canada Del Capitan

LOE ID:	49831
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37994, Nitrate **Region 3**

Canada Del Capitan

LOE ID:	9699
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37994, Nitrate **Region 3**

Canada Del Capitan

LOE ID:	49943
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37994, Nitrate **Region 3**

Canada Del Capitan

LOE ID:	49884
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37994, Nitrate **Region 3**

Canada Del Capitan

LOE ID:	49961
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37994, Nitrate **Region 3**

Canada Del Capitan

LOE ID:	49883
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**53538**	**Region 3**
Canada Del Capitan		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53538, Nitrogen, Nitrite **Region 3**

Canada Del Capitan

LOE ID:	49885
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37368	Region 3
Canada Del Capitan		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Three of 31 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and zero of the 31 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats and the dissolved oxygen levels are supporting those beneficial uses. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 31 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen but zero of the 31 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved	**Region 3**
Canada Del Capitan	

LOE ID:	13233
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	13232
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	13160
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	13145
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	13181
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	13218
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	13162
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	13161
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	49921
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan

	to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	49920
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	49834
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37368, Oxygen, Dissolved **Region 3**

Canada Del Capitan

LOE ID:	49833
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37888**	**Region 3**
Canada Del Capitan		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 28 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37888, Sodium — Region 3

Canada Del Capitan

LOE ID:	9700
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37888, Sodium — Region 3

Canada Del Capitan

LOE ID:	49900
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38009**	**Region 3**
Canada Del Capitan		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 31 samples exceed the water quality objective. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 31 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38009, Specific Conductivity **Region 3**

Canada Del Capitan

LOE ID:	49882
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38009, Specific Conductivity **Region 3**

Canada Del Capitan

LOE ID:	11354
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38009, Specific Conductivity **Region 3**

Canada Del Capitan

LOE ID:	11317
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37889**	**Region 3**
Canada Del Capitan		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceed the evaluation guideline (Moyle 1976). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 28 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37889, Temperature, water **Region 3**

Canada Del Capitan

LOE ID:	13180
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37889, Temperature, water **Region 3**

Canada Del Capitan

LOE ID:	13250
Pollutant:	Temperature, water

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37889, Temperature, water **Region 3**

Canada Del Capitan

LOE ID:	49940
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41905** **Region 3**

Canada Del Capitan

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Two of the 32 samples exceed the evaluation guidelines (Shoup, D.E. and Wahl D.H., 2009 and Sigler et al., 1984) used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. o of the 32 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41905, Turbidity **Region 3**

Canada Del Capitan

LOE ID:	49850
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41905, Turbidity **Region 3**

Canada Del Capitan

LOE ID:	49939
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41905, Turbidity **Region 3**

Canada Del Capitan

LOE ID:	13179
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41905, Turbidity **Region 3**

Canada Del Capitan

LOE ID:	13236
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41905, Turbidity **Region 3**

Canada Del Capitan

LOE ID:	13164
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41905, Turbidity **Region 3**

Canada Del Capitan

LOE ID:	13235
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38030**	**Region 3**
Canada Del Capitan		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six beneficial uses are assessed. Zero of the 31 samples exceed the water quality objectives for Agricultural Supply, Drinking Water and Recreation and 1 of the 31 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 31 samples exceed the water quality objectives for Agricultural Supply, Drinking Water and Recreation and 1 of the 31 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38030, pH — Region 3

Canada Del Capitan

LOE ID:	11355
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH — Region 3

Canada Del Capitan

LOE ID:	11353
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	49922
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	11334
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	11333
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	11335
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	11357
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	11391
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	11390

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	11389
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	49835
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38030, pH — Region 3

Canada Del Capitan

LOE ID:	11337
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH — Region 3

Canada Del Capitan

LOE ID:	11356
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	11336
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	49962
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	49676

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	49965
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38030, pH **Region 3**

Canada Del Capitan

LOE ID:	49899
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Canada Del Capitan to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Canada Del Capitan was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-1/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41958	Region 3
Canada Del Capitan		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The following is a summary of the results from individual toxicity tests. Between 2001 and 2002, two samples were tested using multiple test species (a vertebrate and an invertebrate) and are summarized in LOEs 23856, 23857, 23854 and 24188 and 1 of the 2 samples exhibited significant reduction in survival of the invertebrate test organism relative to the control. Two additional samples were collected between 2008 and 2009 and were also tested using multiple test species but zero of those two samples resulted in a significant toxic effect to any of the test organisms. In summary, there are 4 total samples and 3 of the 4 samples resulted in a significant toxic effect to one or more test organisms and therefore 3 of 4 samples exceed the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 4 samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41958, Toxicity	**Region 3**
Canada Del Capitan	

LOE ID:	23857
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for El Capitan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41958, Toxicity **Region 3**

Canada Del Capitan

LOE ID:	24188
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than

	5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41958, Toxicity **Region 3**

Canada Del Capitan

LOE ID:	23854
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41958, Toxicity **Region 3**

Canada Del Capitan

LOE ID:	23856
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for El Capitan Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

	December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41958, Toxicity **Region 3**

Canada Del Capitan

LOE ID:	53816
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Two of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count and Ceriodaphnia dubia young/female. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 315CAPxxx.
Temporal Representation:	The samples were collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	Data quality is good. Data results were recorded in the SWAMP database and followed SWAMP protocols.
QAPP Information Reference(s):	

DECISION ID	41954	Region 3
Canada Del Capitan		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use the two samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41954, Chlorpyrifos	**Region 3**
Canada Del Capitan	

LOE ID:	16344
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41954, Chlorpyrifos **Region 3**

Canada Del Capitan

LOE ID:	16343
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41955**	**Region 3**
Canada Del Capitan		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41955, Diazinon **Region 3**

Canada Del Capitan

LOE ID:	16767
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41955, Diazinon **Region 3**

Canada Del Capitan

LOE ID:	16766
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for El Capitan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for El Capitan Creek was collected at 1 monitoring site [315CAP-El Capitan Creek d/s Highway 101]
Temporal Representation:	Data was collected over the time period 12/12/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Bell Creek (Santa Barbara Co)**
Water Body ID: **CAR3151001320050531122629**
Water Body Type: **River & Stream**

DECISION ID **37420** **Region 3**
Bell Creek (Santa Barbara Co)

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 28 samples exceed the water quality objective for non-contact recreation and this beneficial use if fully supported. However, 13 of the 28 samples exceed the water quality objective for contact reaction and this use is not supported in Bell Creek.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of the 28 samples exceed the water quality objective for contact reaction and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37420, Fecal Coliform **Region 3**
Bell Creek (Santa Barbara Co)

LOE ID: 49551

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37420, Fecal Coliform **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11567
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 8 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37420, Fecal Coliform **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11568
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37420, Fecal Coliform **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49567
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42980** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Four LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in sediment samples. Zero of the four sediment samples resulted in a significant toxic effect to one or more test organisms.

Eleven LOEs summarize water samples. Five water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, sixteen total samples are available to assess toxic effects in water samples. Nine of the sixteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the 16 water samples resulted in significant toxic effects to one or more test organism relative to the control and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23604
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23646
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23644
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23643
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23645
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]

Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23635
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23623
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23641
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23636
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23603

Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23642
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	23605
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53376
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. Samples included Hyalella azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. a statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 315BEF Bell Creek (Santa Barbara Co).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53377
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Seven of the eleven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia (4 samples) and growth of Selenastrum capricornutum (1 sample), Cyprinodon variegatus (2 samples), and Thalassiosira (1 sample).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. A statistical testis used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 315BEF Bell Creek (Santa Barbara Co).
Temporal Representation:	The samples were collected from 2007 to 2010.

Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42980, Toxicity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	78942
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. Samples included Hyalella azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. a statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 315BEF Bell Creek (Santa Barbara Co).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **33784** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Bell Creek Nitrate TMDL

TMDL Project Code:	1074
Date TMDL Approved by USEPA:	08/20/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of the 41 nitrate samples and 43 of the 63 nitrate/nitrite samples exceed the water quality objectives for the Drinking Water beneficial uses. Twenty-three of the 24 nitrate samples and 50 of the 51 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 1) Dissolved oxygen for this water body ranged from 3.21 mg/L to 16.0 mg/L, at times exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Floating algal mats ranged from 0 to 95 % cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3) Water column chlorophyll a concentration ranged from 0.0 to 30.0 ug/L, at times exceeding screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 2.15 mg/L to 2.20 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-five of the 41 nitrate samples and 43 of the 63 nitrate/nitrite samples exceed the water quality objectives for the Drinking Water beneficial uses. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Twenty-three of the 24 nitrate samples and 50 of the 51 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 5. The Bell Creek Nitrate TMDL has been approved by USEPA on 8/20/2013. 6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49586
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49585
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49372
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49373
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48236
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 38 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49549
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48221
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48222
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48233
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]

Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48234
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 38 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48235
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 29 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	9639
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 15 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15316
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).

Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33784, Nitrate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49548
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37409** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant: **Ammonia**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data and two aquatic life beneficial uses. Two of 65 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and none of the 83 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 10901) and total ammonia (Decision 10902). This decision contains all of the LOEs from those decisions in addition to new LOEs. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 65 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and none of the 83 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49654
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	9828
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49530
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	9827
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	9638
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15300
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]

Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14237
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14236
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48199
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 4/9/2007-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48198
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 4/9/2007-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48197
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37409, Ammonia **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49569

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46847** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009) used to interpret the narrative water quality objective. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009) used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46847, Azinphos-methyl (Guthion) **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53384
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46847, Azinphos-methyl (Guthion) **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53383
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **41591** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 74 samples exceed the evaluation guideline used to interpret the narrative water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 74 samples exceed the evaluation guideline used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41591, Chlorophyll-a **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48209
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41591, Chlorophyll-a **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14251
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41591, Chlorophyll-a **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49371
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41591, Chlorophyll-a **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48200
Pollutant:	Chlorophyll-a

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41591, Chlorophyll-a **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14250
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41591, Chlorophyll-a **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	9840
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41591, Chlorophyll-a **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	9841
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41591, Chlorophyll-a **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49584
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41396**	**Region 3**
Bell Creek (Santa Barbara Co)		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Two samples will not be used in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of the 2 samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41396, Chlorpyrifos **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53387
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41396, Chlorpyrifos **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48210
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41396, Chlorpyrifos **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16342
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41396, Chlorpyrifos **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16341
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41396, Chlorpyrifos **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48211
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46848** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009) used to interpret the narrative water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009) used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46848, Demeton **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53388
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46848, Demeton **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53389
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]

Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 41446 Region 3

Bell Creek (Santa Barbara Co)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the evaluation guideline (Finlayson 2004) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the evaluation guideline (Finlayson 2004) applied to protect for aquatic life beneficial uses and zero of the 2 samples exceed the USEPA drinking water health advisory. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41446, Diazinon Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	53392
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41446, Diazinon **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16752
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41446, Diazinon **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16765
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1

	monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41446, Diazinon **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48220
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41446, Diazinon **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48212

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**46849**	**Region 3**
Bell Creek (Santa Barbara Co)		

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (USEPA, 1985) used to interpret the narrative water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline (USEPA, 1985) used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46849, Dichlorvos **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53394
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46849, Dichlorvos **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53393
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46850** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (California Department of Health Services notification level) for drinking water and zero of the 2 samples exceed the evaluation guideline (Office of Pesticide Programs Ecotoxicity database) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (California Department of Health Services notification level) for drinking water and zero of the 2 samples exceed the evaluation guideline (Office of Pesticide Programs Ecotoxicity database) used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46850, Dimethoate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53396
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity

	database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46850, Dimethoate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53395
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46850, Dimethoate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53397
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**46851**	**Region 3**
Bell Creek (Santa Barbara Co)		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available. Zero of the 2 samples exceed the evaluation guideline (California Department of Health Services notification level) for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (California Department of Health Services

notification level) for drinking water and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46851, Disulfoton **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53400
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46852** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) used to interpret the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) used to interpret the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46852, Escherichia coli (E. coli) **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49565
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46853** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (USEPA, 1985) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (USEPA, 1985) used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46853, Ethoprop **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53339
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46853, Ethoprop **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53401
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46854** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess R]this pollutant. Zero of the 2 samples exceed the evaluation guideline (USEPA drinking water criteria) for drinking water and zero of the 2 samples exceed the evaluation guideline (UCDavis) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the sample exceed any of the relevant criteria and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46854, Malathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53341
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46854, Malathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53342
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46854, Malathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53340
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	46855	Region 3
Bell Creek (Santa Barbara Co)		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (USEPA IRIS reference dose) for drinking water and zero of the 2 samples exceed the evaluation guideline (USEPA, 1985) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (USEPA IRIS reference dose) for drinking water and zero of the 2 samples exceed the evaluation guideline (USEPA, 1985) used to interpret the narrative water quality objective for aquatic life protection and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46855, Methidathion	**Region 3**
Bell Creek (Santa Barbara Co)	

LOE ID:	53345
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46855, Methidathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53344
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.

Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46855, Methidathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53343
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46856** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant: **Methyl Parathion**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (CDFG, 1992) for drinking water and zero of the 2 samples exceed the evaluation guideline (USEPA IRIS reference dose) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (CDFG, 1992) for drinking water and zero of the 2 samples exceed the evaluation guideline (USEPA IRIS reference dose) used to interpret the narrative water quality objective for aquatic life protection and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46856, Methyl Parathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53346
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46856, Methyl Parathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53347
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46856, Methyl Parathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53348
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **36810** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-one lines of evidence are available in the administrative record to assess this pollutant. Two beneficial uses are assessed. Nine of 78 samples exceed the Cold Freshwater Habitat water quality objective for dissolved oxygen but only 1 of the 78 samples exceed the water quality objective for Warm Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is

designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 78 samples exceed the Cold Freshwater Habitat water quality objective for dissolved oxygen but only 1 of the 78 samples exceed the water quality objective for Warm Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13106
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13107
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13108
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13141
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13126
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13127
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13128
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48248
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 7 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48249
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48250

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 17 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48251
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 17 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality

	conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49526
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14252
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14253
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14314
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49374
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved — Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	14327
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved — Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	13091
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49600
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36810, Oxygen, Dissolved **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49587
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46857 **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (National Recommended Water Quality Criteria) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (National Recommended Water Quality Criteria) used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46857, Parathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53359
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46857, Parathion **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53358
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	46872	Region 3
Bell Creek (Santa Barbara Co)		

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (National Academy of Sciences health advisory) for drinking water and zero of the 2 samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. . Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline (National Academy of Sciences health advisory) for drinking water and zero of the 2 samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46872, Phorate	**Region 3**
Bell Creek (Santa Barbara Co)	

LOE ID:	53366
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46872, Phorate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53368
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46872, Phorate **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53367
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46873** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline for drinking water and zero of the 2 samples exceed the

evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.
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Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the evaluation guideline for drinking water and zero of the 2 samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46873, Phosmet **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53371
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1

	monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46873, Phosmet **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53369
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46873, Phosmet **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	53370
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [Bell Creek (Santa Barbara Co) - 315BEF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**37470**	**Region 3**
Bell Creek (Santa Barbara Co)		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Two of the 81 samples exceed the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 81 samples exceed the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37470, Temperature, water **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49529
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37470, Temperature, water **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14316
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37470, Temperature, water **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48037
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37470, Temperature, water **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13125
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37470, Temperature, water **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13144
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41465** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 80 samples exceed the evaluation guideline (Sigler et al. 1984) used to interpret the Cold Freshwater Habitat water quality objective and 10 of the 80 samples exceed the evaluation guideline (Shoup and Wahl 2009) used to interpret the Warm Freshwater Habitat water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 80 samples exceed the evaluation guideline (Sigler et al. 1984) used to interpret the Cold Freshwater Habitat water quality objective and 10 of the 80 samples exceed the evaluation guideline (Shoup and Wahl 2009) used to interpret the Warm Freshwater Habitat water quality objective. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the turbidity guideline is not relevant to this waterbody.

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13142
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14301
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48267
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48266
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	6

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 6 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13109
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14315
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13143
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	13124
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49528
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41465, Turbidity **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49602
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37429	Region 3
Bell Creek (Santa Barbara Co)		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five Beneficial Uses are assessed. Zero of the 77 samples exceed the any of the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 77 samples exceed the any of the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37429, pH	**Region 3**
Bell Creek (Santa Barbara Co)	

LOE ID:	14300
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14266
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14267
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14299
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	14298
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11293
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11571
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11570
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11569
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48265
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48264
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48263
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa

	Barbara Co) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49568
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49566
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49527
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa

	Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	49550
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48253
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	48252
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa

	Barbara Co) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEF - Bell Creek (Santa Barbara Co)]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11297
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11296
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11295
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11294
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not

	be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/17/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	11314
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH — Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	11313
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37429, pH — Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	49601
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41427**	**Region 3**
Bell Creek (Santa Barbara Co)		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41427, Anthracene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15784
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41427, Anthracene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15785
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37428**	**Region 3**
Bell Creek (Santa Barbara Co)		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37428, Arsenic **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15596
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37428, Arsenic **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15595
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41428** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the

Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41428, Benzo(a)anthracene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15712
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41428, Benzo(a)anthracene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15713
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41420 **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41420, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15550
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41420, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	15549
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37296** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37296, Cadmium **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15398
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37296, Cadmium **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15411
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37506 Region 3

Bell Creek (Santa Barbara Co)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses (Cold and Warm Freshwater Habitat). This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses (Cold and Warm Freshwater Habitat). The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37506, Chromium Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	15869
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37506, Chromium **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	15868
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41397**	**Region 3**
Bell Creek (Santa Barbara Co)		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41397, Chrysene (C1-C4) Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	15937
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41397, Chrysene (C1-C4) Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	15938
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37517** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37517, Copper **Region 3**
Bell Creek (Santa Barbara Co)

LOE ID:	16763
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37517, Copper **Region 3**
Bell Creek (Santa Barbara Co)

LOE ID:	16764
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41403** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The sample does not exceed the Evaluation Guideline applied to protect for aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The sample does not exceed the Evaluation Guideline applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41403, Dieldrin **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16824
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41403, Dieldrin **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16728
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41459** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed.

Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41459, Endrin **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16545
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41459, Endrin **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16532
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41460 **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41460, Fluoranthene — Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	16378
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41460, Fluoranthene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16377
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41407 Region 3

Bell Creek (Santa Barbara Co)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41407, Fluorene Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	17259
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41407, Fluorene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17258
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36790**	**Region 3**
Bell Creek (Santa Barbara Co)		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36790, Lead **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17343
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36790, Lead **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17344
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36869	Region 3
Bell Creek (Santa Barbara Co)		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples

	is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36869, Mercury **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17158
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36869, Mercury **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17145
Pollutant:	Mercury

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41408** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41408, Naphthalene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17242
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41408, Naphthalene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17243
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36999** **Region 3**

Bell Creek (Santa Barbara Co)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses (Cold and Warm Freshwater Habitat). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. It should be noted that in the Central Coast, some metals including nickel are naturally elevated due to the geology of the area. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36999, Nickel **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17063
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36999, Nickel **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17064
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41461	Region 3
Bell Creek (Santa Barbara Co)		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41461, Phenanthrene	**Region 3**
Bell Creek (Santa Barbara Co)	

LOE ID:	16958
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41461, Phenanthrene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	16945
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41452 Region 3

Bell Creek (Santa Barbara Co)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41452, Pyrene Region 3

Bell Creek (Santa Barbara Co)

LOE ID:	17845

Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41452, Pyrene **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17844
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	37485	Region 3
Bell Creek (Santa Barbara Co)		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The one sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37485, Zinc **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17938
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37485, Zinc **Region 3**

Bell Creek (Santa Barbara Co)

LOE ID:	17937
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Bell Creek (Santa Barbara Co) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Bell Creek (Santa Barbara Co) was collected at 1 monitoring site [315BEL-Bell Creek on Bacara Resort Access Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Dos Pueblos Canyon Creek**
Water Body ID: **CAR3151001119990225122436**
Water Body Type: **River & Stream**

DECISION ID **39431** **Region 3**
Dos Pueblos Canyon Creek

Pollutant: **Sodium**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the 27 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of the 27 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39431, Sodium **Region 3**
Dos Pueblos Canyon Creek

LOE ID: 10680

Pollutant: Sodium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39431, Sodium **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50103
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**39499**	**Region 3**
Dos Pueblos Canyon Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 26 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 27 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 27 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39499, Ammonia **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	10611
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39499, Ammonia **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	10597
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39499, Ammonia **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	10598
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39499, Ammonia **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50104
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39499, Ammonia **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50082
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39499, Ammonia **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50052
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**39307**	**Region 3**
Dos Pueblos Canyon Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39307, Boron **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50077
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39307, Boron **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	10612
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39308** **Region 3**

Dos Pueblos Canyon Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 27 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39308, Chloride **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	10613
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39308, Chloride **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50089
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39309** **Region 3**

Dos Pueblos Canyon Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39309, Chlorophyll-a **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50115
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39309, Chlorophyll-a **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50093
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39309, Chlorophyll-a **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	10682
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 3/7/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39309, Chlorophyll-a **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	10681
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 3/7/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **47231** **Region 3**

Dos Pueblos Canyon Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Two of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47231, Escherichia coli (E. coli) **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50067
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38741 Region 3

Dos Pueblos Canyon Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the water quality objectives for recreation uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the water quality objectives for recreation uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38741, Fecal Coliform Region 3

Dos Pueblos Canyon Creek

LOE ID:	50066
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38741, Fecal Coliform **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50079
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38741, Fecal Coliform **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12392
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38741, Fecal Coliform **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12408
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39505** **Region 3**

Dos Pueblos Canyon Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. One of the 12 nitrate samples exceeds the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 12 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. One of the 12 nitrate samples exceeds the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 12 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat beneficial uses. These not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	10679
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	10665
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring

	site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/27/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50064
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50095
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50091
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12

samples exceed the criterion for Nitrate as N.

Data Reference: Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.

Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]

Temporal Representation: Data was collected over the time period 1/30/2008-12/17/2008.

Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID: 50116

Pollutant: Nitrate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 12

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.

Data Reference: Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline: Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50092
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50063
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50094
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39505, Nitrate **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50117
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**53544**	**Region 3**
Dos Pueblos Canyon Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53544, Nitrogen, Nitrite **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50101
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38726** **Region 3**

Dos Pueblos Canyon Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Two of the 29 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, zero of the 29 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats and the dissolved oxygen levels are supporting the Warm beneficial use. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 29 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, zero of the 29 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50105
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50048
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50096
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50118
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13093
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13094
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13201
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for

	Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13060
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]

Temporal Representation: Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID: 13059

Pollutant: Dissolved oxygen saturation

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 14

Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Oxygen, Saturation.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]

Temporal Representation: Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13058
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13092
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38726, Oxygen, Dissolved **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13095
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38781 Region 3

Dos Pueblos Canyon Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38781, Specific Conductivity Region 3

Dos Pueblos Canyon Creek

LOE ID:	12409
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38781, Specific Conductivity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12431
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38781, Specific Conductivity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50090
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	39266	Region 3
Dos Pueblos Canyon Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39266, Temperature, water	**Region 3**
Dos Pueblos Canyon Creek	

LOE ID:	50051
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39266, Temperature, water **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13078
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring

	site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39266, Temperature, water **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13112
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39453** **Region 3**

Dos Pueblos Canyon Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Two of the 30 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984) and 2 of the 30 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 30 samples exceed the cold freshwater habitat evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39453, Turbidity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13111
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39453, Turbidity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13110
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39453, Turbidity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13076
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39453, Turbidity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	13077
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39453, Turbidity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50050
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39453, Turbidity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50107
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	38656	Region 3
Dos Pueblos Canyon Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 29 samples exceed the water quality objectives for Agricultural supply, Drinking Water, Recreation, Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38656, pH	**Region 3**
Dos Pueblos Canyon Creek	

LOE ID:	50106
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50080
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50078

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50065
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50049
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	50102

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2008-12/17/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12447
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12465
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12428
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12427

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12410
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12451
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12430
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12411

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12429
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 2/13/2001-3/7/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12450
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring

	site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12448
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38656, pH **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	12449
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 7/16/2001-9/26/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42025**	**Region 3**
Dos Pueblos Canyon Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of zero water samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use two water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero water samples exceeded the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42025, Chlorpyrifos **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	16104
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42025, Chlorpyrifos **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	16360
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41857	Region 3
Dos Pueblos Canyon Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41857, Diazinon	**Region 3**
Dos Pueblos Canyon Creek	

LOE ID:	16784
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41857, Diazinon **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	16785
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42026**	**Region 3**
Dos Pueblos Canyon Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Four LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in water samples. Zero of the two water samples resulted in a significant toxic effect to one or more test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42026, Toxicity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	23849
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42026, Toxicity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	23677
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42026, Toxicity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	23872
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42026, Toxicity **Region 3**

Dos Pueblos Canyon Creek

LOE ID:	23676
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Dos Pueblos Canyon Creek to determine beneficial use support and results are as

	follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Dos Pueblos Canyon Creek was collected at 1 monitoring site [315DOS-Dos Pueblos Canyon Creek at Highway 101]
Temporal Representation:	Data was collected over the time period 12/5/2001-3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Rosa Creek (San Luis Obispo County)**
Water Body ID: **CAR3142001120020124143542**
Water Body Type: **River & Stream**

DECISION ID **37489** **Region 3**
Santa Rosa Creek (San Luis Obispo County)

Pollutant: **Temperature, water**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 116 samples exceeded the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of the 116 samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 37489, Temperature, water **Region 3**
Santa Rosa Creek (San Luis Obispo County)

LOE ID: 13560

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat
Aquatic Life Use: Cold Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37489, Temperature, water **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	18576
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37489, Temperature, water **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13487
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 9 of 54 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37489, Temperature, water **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13524
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 2 monitoring sites [310SRO-Santa Rosa Creek at Moonstone Drive, 310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37489, Temperature, water **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52344
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37489, Temperature, water **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52345
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39251 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which one of the 101 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 105 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 101 samples exceed the water quality objective for unionized ammonia and zero of the 105 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39251, Ammonia Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52346
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52276
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek

	(310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52286
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52285
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52275
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52072
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10083
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10114
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10115
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10116
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section

	II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10084
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 52 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive].
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39251, Ammonia **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10097
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 52 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive].
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52753 **Region 3**

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the five samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life uses (meaning two samples were scored as having 'poor' benthic community composition). In this case, only the Southern California Index of Biotic Integrity (IBI) score is used as the evaluation guideline. Both exceedances ('poor scores') occurred for samples collected at the downstream station. There are no additional supporting evidence indicating that water or sediment concentrations of pollutants in this water segment are contributing to the 'poor' IBI scores. Based on the readily available data and information, the weight of evidence provides insufficient justification for placing Benthic Community Effects on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the SoCal IBI, however, the water segment does not have associated pollutant(s) samples that exceed water quality objectives. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52753, Benthic Community Effects **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	58534
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores in this water body were above 40 and therefore are not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired

	conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310SRUxxx-Santa Rosa Creek at Ferrassi Road
Temporal Representation:	Surveys done on April 23, 2009 and June 2, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52753, Benthic Community Effects **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	58533
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two of the three of the IBI scores are 39 or below and are therefore are below the impairment threshold of the Southern California IBI. In 2005, a methods comparison study was conducted in this waterbody resulting in the collection of more than one sample at the Santa Rosa Creek station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the 2005 sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The three RWB samples included in this assessment have the following IBI scores: The 2005 sample IBI score was 21, the 2009 sample IBI score was 37 and the 2010 sample IBI score was 47.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores or 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310SROxxx-Santa Rosa Ck at Moonstone Beach Drive
Temporal Representation:	Surveys done on May 4, 2005; April 23, 2009; June 2, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	37771	Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 91 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 91 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37771, Boron **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10117
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37771, Boron **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10098
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37771, Boron **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52229
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37771, Boron **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52230
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53103 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 34 samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each monitoring station and the results are as follows: Zero of the four annual means calculated for station 310SRO exceed the site specific objective and the single annual mean calculated for station 310SRU did not exceed the site specific objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the annual means exceed the site specific objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53103, Chloride **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52253
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 6 of 22 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53103, Chloride **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52254
Pollutant:	Chloride

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38718 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Two of the 101 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 101 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52287
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a — Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52289
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a — Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52288
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52290
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	9589
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 50 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13525
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13539
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13488
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10100
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 50 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38718, Chlorophyll-a **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13489
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42475	Region 3
Santa Rosa Creek (San Luis Obispo County)		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of zero water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. The two samples collected will not be included in this decision because: 1) the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect for the single sample. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. 2) A laboratory duplicate was erroneously included in the total count and should be removed. One sediment samples (pore water) exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Another pore water sample was collected and will not be included in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect for the single sample. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42475, Chlorpyrifos — Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16038
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42475, Chlorpyrifos — Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16037
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42475, Chlorpyrifos **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	47711
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (San Luis Obispo County) was collected at 1 monitoring site [Santa Rosa Ck at Moonstone Beach Drive - 310SROxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42475, Chlorpyrifos **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	47726
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (San Luis Obispo County) was collected at 1 monitoring site [Santa Rosa Ck at Moonstone Beach Drive - 310SROxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42475, Chlorpyrifos **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16245
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/18/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42475, Chlorpyrifos **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16244
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/18/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42523 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of

Conclusion:

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Line of Evidence number 16618, states that zero of two samples exceeded the evaluation guideline (Finalyson, 2004); however, this LOE should have stated that zero of one sample exceeded the evaluation guideline because a laboratory duplicated was accidentally included in the count. This decision language corrects that LOE (16618). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline (Finlayson, 2004) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42523, Diazinon **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16618
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/18/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42523, Diazinon **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16619
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/18/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42523, Diazinon **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	47654
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Santa Rosa Creek (San Luis Obispo County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (San Luis Obispo County) was collected at 1 monitoring site [Santa Rosa Ck at Moonstone Beach Drive - 310SROxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42523, Diazinon **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	47669
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Santa Rosa Creek (San Luis Obispo County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (San Luis Obispo County) was collected at 1 monitoring site [Santa Rosa Ck at Moonstone Beach Drive - 310SROxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42523, Diazinon **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16675
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42523, Diazinon **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16676
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37772 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Ten of 62 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 27 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 62 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 27 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37772, Escherichia coli (E. coli) Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	18513
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37772, Escherichia coli (E. coli) **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11701
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 4 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37772, Escherichia coli (E. coli) Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11702
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37772, Escherichia coli (E. coli) **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	18512
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37772, Escherichia coli (E. coli) **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52219
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek

	(310) to determine beneficial use support and results are as follows: 3 of 23 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37772, Escherichia coli (E. coli) Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52233
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	38031	Region 3
Santa Rosa Creek (San Luis Obispo County)		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Zero of the 107 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. Two of the 35 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 36 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Two of the 36 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 107 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. Two of the 35 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 36 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Two of the 36 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38031, Nitrate	**Region 3**
Santa Rosa Creek (San Luis Obispo County)	

LOE ID:	18375
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	18374
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	9572
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	9862
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	9861
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	10099
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52292
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory

	Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52291
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52306
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52073

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52307
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52248
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52302
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52303
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52304
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52305
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52074
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52075
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52076
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38031, Nitrate **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52247
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53110 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 36 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 36 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53110, Nitrogen, Nitrite Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52268
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53110, Nitrogen, Nitrite **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52267
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 24 samples

	exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38032** **Region 3**

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-two lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 116 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 7 of the 116 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of the 116 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 7 of the 116 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table

3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52310
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 12 of 24 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52309
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52308
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52321
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 6 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52322
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52323
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 12 of 24 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52324
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52327

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	12610
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	12611
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 10 of 54 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	12612
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 10 of 54 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	12559
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 54 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13504
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 2 monitoring sites [310SRO-Santa Rosa Creek at Moonstone Drive, 310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13505
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 2 monitoring sites [310SRO-Santa Rosa Creek at Moonstone Drive, 310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	18152
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13541
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13542
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable

	water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13543
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13506
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 2 monitoring sites [310SRO-Santa Rosa Creek at Moonstone Drive, 310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13507
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 2 monitoring sites [310SRO-Santa Rosa Creek at Moonstone Drive, 310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	18151
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38032, Oxygen, Dissolved **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13540
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **53106** **Region 3**

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 34 samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each monitoring station and the results are as follows: Zero of the four annual means calculated for station 310SRO exceed the site specific objective and the single annual mean calculated for station 310SRU did not exceed the site specific objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the annual means exceed the site specific objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53106, Sodium — Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52271
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 22 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53106, Sodium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52272
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42524 **Region 3**

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Six lines of evidence are available in the administrative record to assess this pollutant. One of the 113 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 113 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42524, Specific Conductivity — Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52232
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42524, Specific Conductivity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52231
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42524, Specific Conductivity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11705
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42524, Specific Conductivity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17588

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42524, Specific Conductivity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11646
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42524, Specific Conductivity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11666
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38713 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Four LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in sediment samples. Zero of the two sediment samples resulted in a significant toxic effect to one or more test organisms.

Six LOEs summarize water samples. One water sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and one water sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in water samples. One of the two water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two sediment samples and one of the two water samples resulted in a significant toxic effect to one or more test organisms. However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded and the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24343
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/18/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24332
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24316
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/18/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24342
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%)

	7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/18/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24333
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24323
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/18/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	58535
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Ceriodaphnia dubia reproduction and to Selenastrum capricornm total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310SRO
Temporal Representation:	The sample was collected in March 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	80354
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310SROxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	80353
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Ceriodaphnia dubia reproduction and to Selenastrum capricornm total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310SRO
Temporal Representation:	The sample was collected in March 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38713, Toxicity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	58550
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310SROxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID 39239 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Eight of the 99 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 8 of the 99 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 99 samples exceed the evaluation guideline for Cold Freshwater Habitat and 8 of the 99 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39239, Turbidity Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52331
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39239, Turbidity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52330
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39239, Turbidity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52342
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39239, Turbidity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52343
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39239, Turbidity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13523
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/1/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39239, Turbidity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13486
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 4 of 47 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39239, Turbidity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13522
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/1/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39239, Turbidity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13559
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39239, Turbidity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	13558
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39239, Turbidity **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	12614
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 4 of 47 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37961 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty-six lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Three of the 112 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 5 of the 112 samples exceed the water quality objective for Agricultural Supply, and 13 of the 112 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 112 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 5 of the 112 samples exceed the water quality objective for Agricultural Supply, and 13 of the 112 samples exceed the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37961, pH Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11723
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	19091
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support

	and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11738
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11719
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11682

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11683
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11684
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11685
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11649
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	7

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 7 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11647
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11648
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11663
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 7 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11667
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11686
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11720
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11721
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11722
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11664
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 7 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]

Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	19107
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	19087
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	19088
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	19089
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	19090
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310-SANTA-41 - Santa Rosa Creek at Weymouth St]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11665
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52269
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52234
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52215
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52329
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52328
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52326
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52251
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52216
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52270
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52235
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52252
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37961, pH **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52325
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37705 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Seventeen of 103 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 4 of 103 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of 103 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37705, Fecal Coliform **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11704
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37705, Fecal Coliform **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11703
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37705, Fecal Coliform **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11645
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 54 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37705, Fecal Coliform **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	11630
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 8 of 54 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37705, Fecal Coliform **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52218
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37705, Fecal Coliform — Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52217
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 3 of 23 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37705, Fecal Coliform — Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52236
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	23
Number of Exceedances:	2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 2 of 23 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37705, Fecal Coliform **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52237
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53108 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-six of the 34 samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each monitoring station and the results are as follows: Four of the four annual means calculated for station 310SRO exceed the site specific objective and the single annual mean calculated for station 310SRU exceeded the site specific objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All five of the annual means exceed the site specific objective and this does exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53108, Total Dissolved Solids Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID: 52255

Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 18 of 22 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 500 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected over the time period 7/10/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53108, Total Dissolved Solids **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	52256
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The

	Waterbody Specific Objective is 500 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRU-Santa Rosa Creek at Ferrasci Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42460 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42460, Anthracene Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15833
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42460, Anthracene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15834
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as

	follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42460, Anthracene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15732
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42460, Anthracene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15733
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37472 **Region 3**

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37472, Arsenic **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15820
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37472, Arsenic **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15807
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37472, Arsenic **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15644
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37472, Arsenic **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15643
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42464 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42464, Benzo(a)anthracene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15512
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42464, Benzo(a)anthracene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15513
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42464, Benzo(a)anthracene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15602
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42464, Benzo(a)anthracene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15615
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42463 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42463, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15362
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42463, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15499
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42463, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15361
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42463, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15486
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37479** **Region 3**

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37479, Cadmium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15446
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37479, Cadmium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15347
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37479, Cadmium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15348
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37479, Cadmium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15459
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37241 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Six lines of evidence are available in the administrative record to assess these water segment-pollutant combinations. Four LOEs assess Chromium concentrations and two LOEs are available in the administrative record to assess sediment toxicity. The single sediment sample was not toxic to test organisms. Therefore, Chromium cannot be associated with toxic effects in this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample was not toxic to test organisms. Therefore, Chromium cannot be associated with toxic effects in this waterbody. The sample size for toxicity is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37241, Chromium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24333
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37241, Chromium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16041
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37241, Chromium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16042
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37241, Chromium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24332
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37241, Chromium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16087
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37241, Chromium **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15916
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42476 **Region 3**

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42476, Chrysene (C1-C4) **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15874
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42476, Chrysene (C1-C4) **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15984
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42476, Chrysene (C1-C4) **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15971
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42476, Chrysene (C1-C4) **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15875
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38122 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38122, Copper **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15924
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38122, Copper **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16810
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38122, Copper **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16811
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38122, Copper **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	15959
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42467 **Region 3**

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42467, Dieldrin **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16664
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42467, Dieldrin **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16665
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42467, Dieldrin **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16510
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42467, Dieldrin **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16509
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42468 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42468, Endrin **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16593
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42468, Endrin **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16483
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42468, Endrin **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16484
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42468, Endrin **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16580
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42479 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42479, Fluoranthene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16581
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42479, Fluoranthene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16568
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42479, Fluoranthene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16425
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42479, Fluoranthene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16426
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42457	Region 3
Santa Rosa Creek (San Luis Obispo County)		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42457, Fluorene	**Region 3**
Santa Rosa Creek (San Luis Obispo County)	

LOE ID:	17306
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42457, Fluorene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17307
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42457, Fluorene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16447
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42457, Fluorene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16446
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37824 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37824, Lead **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17139
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37824, Lead **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17281
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37824, Lead **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17280
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37824, Lead **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17140
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37188 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Six lines of evidence (LOEs) are available in the administrative record to assess these water segment-pollutant combinations. Four LOEs assess Mercury concentrations and Two LOEs are available in the administrative record to assess sediment toxicity. The single sample was not toxic to test organisms. Therefore, Mercury cannot be associated with toxic effects in this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment toxicity sample was not toxic to test organisms. Therefore, Mercury cannot be associated with toxic effects in this waterbody. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37188, Mercury Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24333

Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37188, Mercury **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24332
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37188, Mercury **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17363
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37188, Mercury **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17206
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37188, Mercury **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17362
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37188, Mercury **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17193
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42458 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42458, Naphthalene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17179
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42458, Naphthalene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17180
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42458, Naphthalene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17028
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42458, Naphthalene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17029
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37190 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Six lines of evidence (LOEs) are available in the administrative record to assess these water segment-pollutant combinations. Four LOEs are available in the administrative record to assess Nickel concentrations and Two LOEs are available in the administrative record to assess sediment toxicity. The single sample was not toxic to test organisms. Therefore, Nickel cannot be associated with toxic effects in this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample was not toxic to test organisms. Therefore, Nickel cannot be associated with toxic effects in this waterbody. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37190, Nickel Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17001
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37190, Nickel **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17110
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as

	follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37190, Nickel **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24332
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37190, Nickel **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	24333
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]

Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37190, Nickel **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17097
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37190, Nickel **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17000
Pollutant:	Nickel

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42470 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42470, Phenanthrene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16993
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42470, Phenanthrene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17006
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42470, Phenanthrene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17100
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42470, Phenanthrene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17099
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42474 Region 3

Santa Rosa Creek (San Luis Obispo County)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42474, Pyrene Region 3

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17898

Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42474, Pyrene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17897
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42474, Pyrene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16980
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [

	310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42474, Pyrene **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	16981
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37921** **Region 3**

Santa Rosa Creek (San Luis Obispo County)

Pollutant: **Zinc**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37921, Zinc **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17705
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37921, Zinc **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17867
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37921, Zinc **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17882
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37921, Zinc **Region 3**

Santa Rosa Creek (San Luis Obispo County)

LOE ID:	17706
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Rosa Creek (310) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Rosa Creek (310) was collected at 1 monitoring site [310SRO-Santa Rosa Creek at Moonstone Drive]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Ynez River (Cachuma Lake to below city of Lompoc)**
Water Body ID: **CAR3141005019980827094226**
Water Body Type: **River & Stream**

DECISION ID **37971** **Region 3**
Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant: **Sodium**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 69 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of the 69 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37971, Sodium **Region 3**
Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID: 52142

Pollutant: Sodium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 4 of 25 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37971, Sodium **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9849
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	44
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 15 of 44 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37936 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Twenty-seven of the 105 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-seven of the 105 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water

quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37936, Temperature, water **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13226
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37936, Temperature, water **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14447
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37936, Temperature, water **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48806
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 8 of 26 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-5/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37936, Temperature, water **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13339
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 12 of 44 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37936, Temperature, water **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52167
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 5 of 25 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	39319	Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which one of the 89 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 104 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 89 samples exceed the water quality objective for unionized ammonia and zero of the 104 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39319, Ammonia	**Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52143
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52177
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc)

	was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52133
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14397
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9804
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9805
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15281
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]

Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14396
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9803
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48996
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 12/17/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48994
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level

	is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-5/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39319, Ammonia **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48995
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 12/17/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	52758	Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample was below 40 on the SoCal IBI which indicates poor water quality for this area. However, this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 52758, Benthic Community Effects **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	58468
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The average of the two duplicate IBI scores is below 39 and therefore are below the impairment threshold of the Southern California IBI. In 2005, a methods comparison study was conducted in this waterbody resulting in sample events where more than one sample was collected at a station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI scores from the samples that were collected following the SWAMP Reach Wide Benthos method, or RWB. This sample was also a field duplicate and so the two duplicates samples collected following the RWB method are averaged to create a single IBI score. The two replicate IBI scores were 13 and 3 and the average of those scores is 8

Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 314SYCxxx-Santa Ynez River d/s Lake Cachuma at Highway 154
Temporal Representation:	Surveys done on April 19, 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

DECISION ID 38083 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 69 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 69 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38083, Boron Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9818
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38083, Boron **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52190
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply

Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38344** **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Eight of the 69 samples exceed the water quality objective for agricultural supply. This use is fully supported. In addition, LOE 25255 summarizes data compared to the site specific (or waterbody specific) water quality objective for the Santa Ynez River between Lompoc and Lake Cachuma. Twenty of the 44 samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each monitoring station and the results are as follows: Stations 314SYC and 314SYL are compared to the site specific objective for the Solvang area (annual mean of 50 mg/L) and station 314SYI is compared to the site specific objective for the Lompoc area (annual mean of 100 mg/L). Two of the six annual means calculated for these stations exceed the site specific water quality objective. This sample size (as annual means) is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 69 samples exceed the water quality objective for agricultural supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Two of the six annual means calculated for the samples exceeded the site specific water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38344, Chloride **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	25255
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	44
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Forty-four samples, collected from three sites between the city of Lompoc and Lake Cachuma, were analyzed for Chloride (between January 2001 and March 2002). Of these 44 samples, 6 exceed the waterbody specific objective for Lompoc (expressed as a median value) and 20 exceed the waterbody specific objective for Solvang (also expressed as a median value). However, the median value for this data-set is 40 mg/L and this does not exceed the objective.
Data Reference:	CCAMP water quality data -file #1 CCAMP water quality data -file #2 CCAMP water quality data -file #3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters, enclosed bays and estuaries (Central Coast Water Quality Control Plan, Chapter II, Section II.A.3) state that objectives are based on preservation of existing quality or water quality enhancement believed attainable following control of point sources. The median value for Chloride from Table 3-7 for Santa Ynez River at Lompoc is 100 mg/L and at Solvang is 50 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	CCAMP staff collected data from three sites in the Santa Ynez River between Lompoc and Lake Cachuma: at the Highway 246 Bridge (314SYL), at the Avenue of the Flags Bridge (314SYI) and at the Highway 154 Bridge (314SYC).
Temporal Representation:	Monthly monitoring was conducted at each of these three sites between January 2001 and March 2002, in late summer and fall when flow was not present.
Environmental Conditions:	The Santa Ynez River was dry between Lompoc and Solvang from August through October 2001.
QAPP Information:	SWAMP QAPP (Puckett et al., 2002)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38344, Chloride **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9819
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	44
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 6 of 44 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38344, Chloride **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52127
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39489** **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 99 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 99 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52152
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52134
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13317
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13316
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9833
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49012
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9820
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48997
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14297
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39489, Chlorophyll-a **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14311
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48828**	**Region 3**
Santa Ynez River (Cachuma Lake to below city of Lompoc)		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Two of 25 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 25 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48828, Escherichia coli (E. coli) **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52192
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37991	Region 3
Santa Ynez River (Cachuma Lake to below city of Lompoc)		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Seven of 66 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 1 of 66 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 66 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 66 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37991, Fecal Coliform	**Region 3**
Santa Ynez River (Cachuma Lake to below city of Lompoc)	

LOE ID:	52194
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37991, Fecal Coliform **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52191
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]

Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37991, Fecal Coliform **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11363
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37991, Fecal Coliform **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11306
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37992 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nineteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 73 nitrate samples and zero of the 51 nitrate / nitrite samples exceed the water quality objectives for Agricultural uses and Municipal and Domestic Supply uses (i.e. drinking water). In addition, samples (collected in between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Zero of the 29 nitrate samples and two of the 51 nitrate / nitrite samples exceed the evaluation guideline. There is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 73 nitrate samples and zero of the 51 nitrate / nitrite samples exceed the water quality objectives for Agricultural uses and Municipal and Domestic Supply uses (i.e. drinking water). Zero of the 29 nitrate samples and two of the 51 nitrate / nitrite samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49032
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 11/18/2008-3/24/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49033
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49046
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49047
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49048
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49014
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 11/18/2008-3/24/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49031
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 11/18/2008-3/24/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15297
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49030
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California, U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 11/18/2008-3/24/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9834
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	9835
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52130
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52154
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52179
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52144
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52129
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate

	exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52180
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52153
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37992, Nitrate **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52145

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52958** **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52958, Nitrogen, Nitrite **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52140
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37370 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Two of the 103 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 103 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 103 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 103 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52147
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52146
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52164
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52155
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14313
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of

	Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49064
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc)

	was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13190
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 44 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13191
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 44 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13208
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13209
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13188
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13189
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13340

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14410
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of

	Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14411
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14312
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49049
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49062
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49063
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246,

	314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37370, Oxygen, Dissolved **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13341
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38046 **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 95 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 95 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38046, Specific Conductivity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11398
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38046, Specific Conductivity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49013
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38046, Specific Conductivity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11364
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38046, Specific Conductivity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52128

Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38692 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 104 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 14 of the 104 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl

D.H., 2009), both used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 104 samples exceed the evaluation guideline for Cold Freshwater Habitat and 14 of the 104 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52166
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 4 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52157
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101, 314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13338
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	43
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 5 of 43 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13224
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13225
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc)

	was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48805
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 5 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-5/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14445
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14446
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of

	Lompoc) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48804
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 5 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon.

	Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-5/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38692, Turbidity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	13207
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 5 of 43 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	37957	Region 3
Santa Ynez River (Cachuma Lake to below city of Lompoc)		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 102 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat, and Agricultural Supply. Seven of the 102 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 102 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat, and Agricultural Supply. Seven of the 102 samples exceed the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37957, pH	**Region 3**
Santa Ynez River (Cachuma Lake to below city of Lompoc)	

LOE ID:	11380
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11381
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc)

	was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11382
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	43
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11399
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11418
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11383
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11400
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH — Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11401
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH — Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11419
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11365
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11366
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14429
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	11417
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14412
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14413
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]

Temporal Representation: Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID: 14430

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 7

Number of Exceedances: 3

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data
Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]

Temporal Representation: Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14431
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	14428
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48799
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48800
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48801

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48802
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	48803
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	49065
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 2 monitoring sites [314SYL-Santa Ynez River u/s Lompoc at Highway 246, 314SYI-Santa Ynez River at Highway 101]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52131
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52193
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52181
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52141
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52156
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37957, pH **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	52165
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	38690	Region 3
Santa Ynez River (Cachuma Lake to below city of Lompoc)		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Four LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in sediment samples. Zero of the four sediment samples resulted in a significant toxic effect to one or more test organisms. Twelve LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and nine water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, sixteen total samples are available to assess toxic effects in water samples. Five of the sixteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 16 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38690, Toxicity	**Region 3**
Santa Ynez River (Cachuma Lake to below city of Lompoc)	

LOE ID:	24771
Pollutant:	Vertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24772
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24783
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24784
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 2 samples

	exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24631
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24630
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24629
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24770
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24782
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24747
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]

Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24734
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	24746
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	58538
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the three samples exhibited significant toxicity. The samples were tested for toxicity to survival and growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 314SYI-Santa Ynez River at Highway 101, and 314SYL-Santa Ynez River u/s Lompoc at Highway 246.
Temporal Representation:	The samples were collected in April 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	80358
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Five of the 9 samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of

	Ceriodaphnia dubia.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 314SYI-Santa Ynez River at Highway 101, and 314SYL-Santa Ynez River u/s Lompoc at Highway 246.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	80359
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the three samples exhibited significant toxicity. The samples were tested for toxicity to survival and growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 314SYI-Santa Ynez River at Highway 101, and 314SYL-Santa Ynez River u/s Lompoc at Highway 246.
Temporal Representation:	The samples were collected in April 2008 and 2009.

Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38690, Toxicity **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	58537
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Five of the 9 samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 314SYI-Santa Ynez River at Highway 101, and 314SYL-Santa Ynez River u/s Lompoc at Highway 246.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 42403 **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42403, Anthracene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15635
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]

Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42403, Anthracene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15636
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37196 **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37196, Arsenic **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15719
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37196, Arsenic **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15706
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42418 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42418, Benzo(a)anthracene — Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15775
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42418, Benzo(a)anthracene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15774
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42374 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42374, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15403
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial

	use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42374, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15390
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37907 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37907, Cadmium Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15503
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37907, Cadmium **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15504
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42528 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000,with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, this decision will not use the six samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42528, Chlorpyrifos **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16292
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42528, Chlorpyrifos **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16293
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38095 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38095, Chromium **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15946
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38095, Chromium **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15945
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42419 **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42419, Chrysene (C1-C4) **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16030
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42419, Chrysene (C1-C4) **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16031
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37880 **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37880, Copper **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15861
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37880, Copper **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	15862
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42539** **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42539, Diazinon — Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16667
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42539, Diazinon **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16668
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson

	(2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 3 monitoring sites [314SYC-Santa Ynez River d/s Lake Cachuma at Highway 154, 314SYI-Santa Ynez River at Highway 101, 314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42533 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42533, Dieldrin Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16790
Pollutant:	Dieldrin

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42533, Dieldrin **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16791
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42534 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42534, Endrin Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16388
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42534, Endrin **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16387
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42575 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 42575, Fluoranthene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16485
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42575, Fluoranthene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16472
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42485 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42485, Fluorene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16601
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42485, Fluorene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16602
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37366 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37366, Lead **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17185
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37366, Lead **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17184
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37304 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did

not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37304, Mercury **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17269
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37304, Mercury **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17282
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42555** **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

Conclusion:	the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42555, Naphthalene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17336
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42555, Naphthalene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17335
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37305 **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37305, Nickel **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16917
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37305, Nickel **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16918
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42567 **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42567, Phenanthrene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17003
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42567, Phenanthrene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17004
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	42558	Region 3
Santa Ynez River (Cachuma Lake to below city of Lompoc)		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42558, Pyrene	**Region 3**
Santa Ynez River (Cachuma Lake to below city of Lompoc)	

LOE ID:	17121
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42558, Pyrene **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	16880
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37354 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37354, Zinc Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17756
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37354, Zinc **Region 3**

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	17771
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (Cachuma Lake to below city of Lompoc) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Ynez River (Cachuma Lake to below city of Lompoc) was collected at 1 monitoring site [314SYL-Santa Ynez River u/s Lompoc at Highway 246]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 32767 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32767, Sedimentation/Siltation Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	4010
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)

Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 38345 Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. This decision partially replaces the decision for Salinity/TDS/Chlorides. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Although 11 of 44 samples exceed the waterbody specific objective for Lompoc and 23 exceed the waterbody specific objective for Solvang, this objective is expressed as a median value. The median value for this data-set is 795 mg/L and this exceeds the objective for Solvang but not for Lompoc. Therefore, this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38345, Total Dissolved Solids Region 3

Santa Ynez River (Cachuma Lake to below city of Lompoc)

LOE ID:	25254
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	44

Number of Exceedances:	11
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty-four samples, collected from three sites between the city of Lompoc and Lake Cachuma, were analyzed for TDS (between January 2001 and March 2002). Of these 44 samples, 11 exceed the waterbody specific objective for Lompoc (expressed as a median value) and 23 exceed the waterbody specific objective for Solvang. The median value for this data-set is 795 mg/L and this exceeds the objective for Solvang but not for Lompoc.
Data Reference:	CCAMP water quality data -file #1 CCAMP water quality data -file #2 CCAMP water quality data -file #3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters, enclosed bays and estuaries (Central Coast Water Quality Control Plan, Chapter II, Section II.A.3) state that objectives are based on preservation of existing quality or water quality enhancement believed attainable following control of point sources. The median value for TDS from Table 3-7 for Santa Ynez River at Lompoc is 1000 mg/L and at Solvang is 700 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	CCAMP staff collected data from three sites in the Santa Ynez River between Lompoc and Lake Cachuma: at the Highway 246 Bridge (314SYL), at the Avenue of the Flags Bridge (314SYI) and at the Highway 154 Bridge (314SYC).
Temporal Representation:	Monthly monitoring was conducted at each of these three sites between January 2001 and March 2002, in late summer and fall when flow was not present.
Environmental Conditions:	The Santa Ynez River was dry between Lompoc and Solvang from August through October 2001.
QAPP Information:	SWAMP QAPP (Puckett et al., 2002)
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Ynez River (below city of Lompoc to Ocean)**
Water Body ID: **CAR3141004020050816125631**
Water Body Type: **River & Stream**

DECISION ID **38060** **Region 3**
Santa Ynez River (below city of Lompoc to Ocean)

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Eighty-six of the 113 samples exceed the water quality objective for agricultural uses. In addition, LOE 25252 summarizes data compared to the site specific objective for the Santa Ynez River near Lompoc. Forty-nine of the 65 samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data and all five of the annual means exceed the site specific water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighty-six of the 113 samples exceed the water quality objective for agricultural uses and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. All five of the annual means exceed the site specific water quality objective and this also exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38060, Chloride **Region 3**
Santa Ynez River (below city of Lompoc to Ocean)

LOE ID: 52080

Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38060, Chloride **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52079
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 30 of 36 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38060, Chloride **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9852
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 11 of 16 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]

Temporal Representation: Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38060, Chloride **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID: 9650

Pollutant: Chloride

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 49

Number of Exceedances: 36

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 36 of 49 samples exceed the criterion for Chloride.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]

Temporal Representation: Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38060, Chloride **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	25252
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	65
Number of Exceedances:	49
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Sixty-five samples, collected from two sites below the city of Lompoc, were analyzed for Chloride (between January 2001 and December 2006). Of these 65 samples, 49 exceed the waterbody specific objective. In addition, the median value for this data-set is 181 mg/L and this does exceed the objective.
Data Reference:	CCAMP water quality data -file #1 CCAMP water quality data -file #2 CCAMP water quality data -file #3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters, enclosed bays and estuaries (Central Coast Water Quality Control Plan, Chapter II, Section II.A.3) state that objectives are based on preservation of existing quality or water quality enhancement believed attainable following control of point sources. The median value for Chloride, from table 3-7, for Santa Ynez River at Lompoc is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	CCAMP staff collected data from two sites in the Santa Ynez River below Lompoc; at the Floradale Bridge (314SYF) and at the 13th St. bridge (314SYN).
Temporal Representation:	Monthly monitoring was conducted at 13th St. bridge site (314SYN) between January 2001 and December 2006 (with the exception of April 2004-December 2004). Monthly monitoring was also conducted at the Floradale Bridge site(314SYF) between January 2001 and March 2002.
Environmental Conditions:	In late summer and fall, flow is dominated by effluent discharge from the Lompoc WWTP at the Floradale site.
QAPP Information:	SWAMP QAPP (Puckett et al., 2002)
QAPP Information Reference(s):	

DECISION ID 37645 **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty-one of 73 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 25 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Twenty-one of 73 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37645, Escherichia coli (E. coli) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11509
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2005-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37645, Escherichia coli (E. coli) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11510
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2005-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37645, Escherichia coli (E. coli) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52124
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37645, Escherichia coli (E. coli) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52123
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 10 of 36 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37644 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Thirty-two of 119 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 2 of 119 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-one of 119 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37644, Fecal Coliform Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52122
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37644, Fecal Coliform **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52121
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River

	(below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 36 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37644, Fecal Coliform **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52136
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37644, Fecal Coliform **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52135
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37644, Fecal Coliform **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11434
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37644, Fecal Coliform **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11323
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 13 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37644, Fecal Coliform **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11420
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period

exceed 400 MPN/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]

Temporal Representation: Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37644, Fecal Coliform **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID: 11324

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 57
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Coliform, Fecal.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]

Temporal Representation: Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	33141	Region 3
Santa Ynez River (below city of Lompoc to Ocean)		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 144 nitrate samples and zero of the 114 nitrate / nitrite samples exceed the water quality objective for Agricultural Supply uses. However, 58 of the 72 nitrate samples and 57 of the 126 nitrate / nitrite samples exceed the water quality objective for Municipal and Domestic Supply uses (i.e. drinking water). In addition, samples (collected in between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Fifty-seven of the 144 nitrate samples and 94 of the 114 nitrate / nitrite samples exceed the evaluation guideline. This water segment is also on the 303(d) List due to low dissolved oxygen conditions. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-eight of the 72 nitrate samples and 57 of the 126 nitrate / nitrite samples exceed the water quality objective for Municipal and Domestic Supply uses (i.e. drinking water) and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33141, Nitrate	**Region 3**
Santa Ynez River (below city of Lompoc to Ocean)	

LOE ID:	48797
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	58
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 58 of 67 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9619
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48798
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	67
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 31 of 67 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was

	collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9665
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48795
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 21 of 24 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48796
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 67 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15280
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9666
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 21 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9632
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49060
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 11 of 24 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49059
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 21 of 24 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49058
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48935
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	58
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 58 of 67 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52086
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52085
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52115
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 36 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52118
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52117
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 11 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52116
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52172
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was

	collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52100
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52099
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 27 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52098
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52097
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as

	follows: 27 of 36 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52163
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 27 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52161
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 27 of 36 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52084
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52162
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33141, Nitrate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52083
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37729** **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-eight lines of evidence are available in the administrative record to assess this pollutant. Eighty-five of the 201 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 55 of the 201 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats, therefore these uses are not supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighty-five of the 201 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 55 of the 201 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Both of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52104
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52103
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 17 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52102
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52101
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 10 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52174
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52175
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 17 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52176
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52173
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13241
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	16
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13242
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14345
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14346
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14347
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14344
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to

	determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13318
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 12 of 56 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48938
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 31 of 62 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13065

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 56 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13066
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 22 of 56 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13067
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 22 of 56 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was

	collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48939
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	42
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 42 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13277
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13278
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13279
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale,

	314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13280
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48954

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	42
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 42 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13244
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13243
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37729, Oxygen, Dissolved **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48936
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 36 of 62 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **37175** **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown

Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Ninety-eight of the 113 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ninety-eight of the 113 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37175, Sodium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9633
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 13 of 16 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37175, Sodium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9667
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 41 of 49 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37175, Sodium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52091
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 34 of 36 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37175, Sodium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52092
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12

Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38014 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Fifty-six of the 207 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-six of the 207 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38014, Temperature, water **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52110
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38014, Temperature, water **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52109
Pollutant:	Temperature, water

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 36 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38014, Temperature, water **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13299
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38014, Temperature, water **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14395
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38014, Temperature, water **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13263
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 7 of 16 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38014, Temperature, water **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13084
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 14 of 56 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38014, Temperature, water **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48978
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	68
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 24 of 68 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **39479** **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Twelve LOEs summarize unionized ammonia data in which 13 of the 180 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Six LOEs summarize total ammonia data and zero of the 206 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of the 180 samples exceed the water quality objective for unionized ammonia and zero of the 206 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9850
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14296
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15279
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14328
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49009
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	74
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 74 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9813
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49011
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 3 of 49 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 4/9/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9634
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9635
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street].
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9648
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street].
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9812
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Ammonia as N, Un
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale].
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49010
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 3 of 49 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries)

	states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 4/9/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52094
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52111
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52093
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 35 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52150
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52149
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 35 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39479, Ammonia **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52112

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51719 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two water samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51719, Azinphos-methyl (Guthion) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58566
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51719, Azinphos-methyl (Guthion) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58565
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **57095** **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.9 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample does exceed the evaluation guideline but information is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceeded the evaluation guideline but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 57095, Benthic Community Effects **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	78418
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The average of the two duplicate IBI scores is below 39 and therefore are below the impairment threshold of the Southern California IBI. In 2005, a methods comparison study was conducted in this waterbody resulting in sample events where more than one sample was collected at a station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI scores from the samples that were collected following the SWAMP Reach Wide Benthos method, or RWB. This sample was also a field duplicate and so the two duplicates samples collected following the RWB method are averaged to create a single IBI score. The two replicate IBI scores were 13 and 3 and the average of those scores is 8
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13

Spatial Representation:	Surveys done at the following station: 314SYN-Santa Ynez River at 13th St. Note the data is incorrectly associated with station 314SYC, but the sample collected on 4/19/2007 is in fact from station 314SYN.
Temporal Representation:	Surveys done on April 19, 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

DECISION ID 37171 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 113 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 113 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37171, Boron Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9851
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37171, Boron **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9649
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the

	maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37171, Boron **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52077
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37171, Boron **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52078
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39526 **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 190 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 190 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9618
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13300
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13315
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer

	months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14330
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14329
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9617
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9664
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	9651
Pollutant:	Chlorophyll-a

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49027
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49026
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Chlorophyll a.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52160
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52095
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52151
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39526, Chlorophyll-a **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52096
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	44541	Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of two water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). Four samples were not included in the assessment because the reporting limits were higher than the evaluation guideline and the results were non-detect. Zero of two samples exceeded the USEPA drinking water health advisory. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of two water samples exceeded the aquatic life evaluation guideline and none of the water sample exceeded the municipal and domestic supply objective. The single sediment sample (pore water) exceeded the evaluation guideline; however this sample will not be included in the exceedance count because the criteria used are specific to water samples, not sediment pore water. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 44541, Chlorpyrifos	**Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58577
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44541, Chlorpyrifos **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16039
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44541, Chlorpyrifos **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16294
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring

	includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44541, Chlorpyrifos **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16295
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44541, Chlorpyrifos **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16052
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44541, Chlorpyrifos **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49028
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44541, Chlorpyrifos **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49029
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**51834**	**Region 3**
Santa Ynez River (below city of Lompoc to Ocean)		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51834, Demeton **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58578
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51834, Demeton **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58362
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 42527 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the evaluation guideline (Finalyson, 2004) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42527, Diazinon **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58365
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42527, Diazinon **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49045
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42527, Diazinon **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49044
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42527, Diazinon **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16678
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42527, Diazinon **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16669
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42527, Diazinon **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16670

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42527, Diazinon **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16677
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 51845 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51845, Dichlorvos **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58366
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51845, Dichlorvos **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58371
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **51855** **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of two water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51855, Dimethoate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58374
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51855, Dimethoate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58373
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51855, Dimethoate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58372
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	51873	Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51873, Disulfoton **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58385
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **51894** **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline applied to protect for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51894, Ethoprop **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58387
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC)

	of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51894, Ethoprop **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58386
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	52006	Region 3
Santa Ynez River (below city of Lompoc to Ocean)		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of two water samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52006, Malathion	**Region 3**
Santa Ynez River (below city of Lompoc to Ocean)	

LOE ID:	58400
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52006, Malathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58399
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52006, Malathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58388
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 52044 **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of two water samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52044, Methidathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58401
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was

	collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52044, Methidathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58402
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52044, Methidathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58403
Pollutant:	Methidathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 52059 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of two samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of two samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52059, Methyl Parathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58418
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52059, Methyl Parathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58416
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phorate is 1.8 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52059, Methyl Parathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58417
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to

	Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 52926 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 48 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 48 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52926, Nitrogen, Nitrite Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52088
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52926, Nitrogen, Nitrite **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52087
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River

	(below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 52092 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52092, Parathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58392
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52092, Parathion **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58393
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 52150 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline for the aquatic life beneficial use and the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52150, Phorate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58409
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52150, Phorate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58421
Pollutant:	Phorate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52150, Phorate **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58422
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 52278 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of two water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of two water samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52278, Phosmet Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58425
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52278, Phosmet **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58423
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52278, Phosmet **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58424
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [Santa Ynez River (below city of Lompoc to Ocean) - 314SYF]
Temporal Representation:	Data was collected over the time period 8/19/2009-9/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 37945 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 189 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 189 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37945, Specific Conductivity — Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	49043
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37945, Specific Conductivity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11456
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was

	collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37945, Specific Conductivity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11435
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37945, Specific Conductivity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11488
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37945, Specific Conductivity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52081
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37945, Specific Conductivity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52082
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39475 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of the 194 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 23 of the 194 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Twenty-five of the 194 samples exceed the evaluation guideline for Cold Freshwater Habitat and 23 of the 194 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39475, Turbidity Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52189
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52108
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52107
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 3 of 34 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52188
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 3 of 34 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14380
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver

	Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13297
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48976
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	68
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 11 of 68 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48977
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	68
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 68 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14394
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13069
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 49 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13298
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13261
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13262
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39475, Turbidity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	13068
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 49 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39534 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and four additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, six total samples are available to assess toxic effects in sediment samples. One of the six sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Twelve LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twenty-one water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-eight total samples are available to assess toxic effects in water samples. Twelve of the twenty-eight water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 28 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24779
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was

	collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24768
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN001 - Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24351
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24731
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24733
Pollutant:	Invertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24350
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24379
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP

	(2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24743
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24780
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24757
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24732
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24769
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN001 - Santa Ynez River at 13th Street, 314SYF-

	Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24767
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24378
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale].
Temporal Representation:	Data was collected over the time period 2/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	80356
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	12
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-one samples were collected to evaluate water toxicity. Twelve of the 21 samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia and growth of Selenastrum capricornutum.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 314SYN-Santa Ynez River at 13th Street and 314SYF-Santa Ynez River d/s Lompoc at Floordale.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	80357
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Four samples were collected to evaluate sediment toxicity. One of the four samples exhibited significant toxicity to Hyalella Azteca growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 314SYN-Santa Ynez River at 13th Street and 314SYF-Santa Ynez River d/s Lompoc at Floordale.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58454
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to evaluate sediment toxicity. One of the four samples exhibited significant toxicity to Hyalella Azteca growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 314SYN-Santa Ynez River at 13th Street and 314SYF-Santa Ynez River d/s Lompoc at Floordale.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.

Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39534, Toxicity **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	58442
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	12
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-one samples were collected to evaluate water toxicity. Twelve of the 21 samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia and growth of Selenastrum capricornutum.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 314SYN-Santa Ynez River at 13th Street and 314SYF-Santa Ynez River d/s Lompoc at Floordale.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 37159 **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Forty-two lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Forty-nine of the 199 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 13 of the 199 samples exceed the water quality objective for Agricultural Supply, and 18 of the 199 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-nine of the 199 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52125
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52126
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52138
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52137
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52120
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52119
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52106
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52105
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 36 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52187
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52186
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 36 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52089
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	52090
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14378
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48955
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	62
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 9 of 62 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48956
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 29 of 62 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48957

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	62
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 10 of 62 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48958
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	62
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 10 of 62 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48974
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	62
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 10 of 62 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	48975
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 29 of 62 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYN-Santa Ynez River at 13th Street, 314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14377
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14363
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14362
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14361
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	14360
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11307
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11470
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11455
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11454
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11453
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11436
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11474
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11473
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11491
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11490
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11489
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 3 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11437
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11487
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11472
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11471
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 2 monitoring sites [314SYF-Santa Ynez River d/s Lompoc at Floordale, 314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/5/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11508
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11506
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor

	raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37159, pH **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	11507
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 5 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN-Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42587	Region 3
Santa Ynez River (below city of Lompoc to Ocean)		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42587, Anthracene	**Region 3**
Santa Ynez River (below city of Lompoc to Ocean)	

LOE ID:	15849
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42587, Anthracene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15850
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]

Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42587, Anthracene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15769
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42587, Anthracene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15783
Pollutant:	Anthracene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37355 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37355, Arsenic **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15660
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37355, Arsenic **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15659
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37355, Arsenic **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15854
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37355, Arsenic **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15855
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42625 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42625, Benzo(a)anthracene Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15711

Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42625, Benzo(a)anthracene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15528
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use

	support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42625, Benzo(a)anthracene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15529
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42625, Benzo(a)anthracene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15666
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42588 **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42588, Benzo(a)pyrene (3,4-Benzopyrene -7-d) — Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15547
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42588, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15377
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42588, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15378
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42588, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15548
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38005** **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial

uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38005, Cadmium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15397
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38005, Cadmium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15396
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38005, Cadmium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15462
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38005, Cadmium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15475
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38006 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38006, Chromium Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16091
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38006, Chromium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16090
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38006, Chromium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15917
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38006, Chromium **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16102
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42551** **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42551, Chrysene (C1-C4) — Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15936
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42551, Chrysene (C1-C4) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16000
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42551, Chrysene (C1-C4) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15987
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42551, Chrysene (C1-C4) **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	15923
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37993 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37993, Copper **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16827
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37993, Copper **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16761
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37993, Copper **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16828
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37993, Copper **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16762
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42552 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42552, Dieldrin Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16525
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42552, Dieldrin **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16681
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42552, Dieldrin **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16526
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42552, Dieldrin **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16682
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42554 **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42554, Endrin **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16843
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42554, Endrin **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16373
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42554, Endrin **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16531
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42554, Endrin **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16596
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41944 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41944, Fluoranthene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16364
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41944, Fluoranthene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16363

Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41944, Fluoranthene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16441
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41944, Fluoranthene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16442
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]

Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41984 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41984, Fluorene Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16480
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41984, Fluorene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17322
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41984, Fluorene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17323
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41984, Fluorene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16479
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38086** **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

Conclusion:	the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38086, Lead **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17156
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38086, Lead **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17329
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38086, Lead **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17155

Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38086, Lead **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17342
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38076 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38076, Mercury **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17222
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38076, Mercury **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17209

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38076, Mercury **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17144
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38076, Mercury **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17143
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]

Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 44232 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44232, Naphthalene Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17196
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44232, Naphthalene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17045
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44232, Naphthalene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17044
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44232, Naphthalene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17197
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37346 **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Two out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. However, zero out of two of the sediment samples exhibited toxicity. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of two sediment samples exceeded the evaluation guideline; however these samples did not exhibit toxicity. Therefore, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37346, Nickel **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17113
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37346, Nickel **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16888
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37346, Nickel **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24743
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37346, Nickel **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24732
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37346, Nickel **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24733

Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37346, Nickel **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	24731
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314FYF - Santa Ynez River at Floordale]
Temporal Representation:	Data was collected on a single day 5/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37346, Nickel **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17062
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37346, Nickel **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17049
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41990 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41990, Phenanthrene Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16944
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41990, Phenanthrene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17009
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001)

	data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41990, Phenanthrene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17022
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41990, Phenanthrene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	16894
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41991 **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41991, Pyrene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17827
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41991, Pyrene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17843
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41991, Pyrene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17915
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41991, Pyrene **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17916

Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37778 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two

sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37778, Zinc **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17936
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was

	collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37778, Zinc **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17935
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYF-Santa Ynez River d/s Lompoc at Floordale]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37778, Zinc **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17722

Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37778, Zinc **Region 3**

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	17723
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Ynez River (below city of Lompoc to Ocean) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Ynez River (below city of Lompoc to Ocean) was collected at 1 monitoring site [314SYN001 - Santa Ynez River at 13th Street]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 32827 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32827, Sedimentation/Siltation Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	4008
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0

Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 37746 Region 3

Santa Ynez River (below city of Lompoc to Ocean)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Forty of 72 samples, and the median value, exceed the Waterbody Specific Objective (which is expressed as a median) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty of 72 samples, and the median value, exceed the Waterbody Specific Objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37746, Total Dissolved Solids Region 3

Santa Ynez River (below city of Lompoc to Ocean)

LOE ID:	25249
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	72
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Seventy-two samples, collected from two sites below the city of Lompoc, were analyzed for TDS (between January 2001 and December 2006). Of these 72 samples, 40 exceed the waterbody specific objective. However, the median value for this data-set is 1050 mg/L and this also exceeds the objective.
Data Reference:	CCAMP water quality data -file #1 CCAMP water quality data -file #2 CCAMP water quality data -file #3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters, enclosed bays and estuaries (Central Coast Water Quality Control Plan, Chapter II, Section II.A.3) state that objectives are based on preservation of existing quality or water quality enhancement believed attainable following control of point sources. The median value from table 3-7 for Santa Ynez river at Lompoc is 1000 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	CCAMP staff collected data from two sites in the Santa Ynez River below Lompoc; at the Floradale Bridge (314SYF) and at the 13th St. bridge (314SYN).
Temporal Representation:	Monthly monitoring was conducted at 13th St. bridge site (314SYN) between January 2001 and December 2006 (with the exception of April 2004-December 2004). Monthly monitoring was also conducted at the Floradale Bridge site(314SYF) between January 2001 and March 2002.
Environmental Conditions:	In late summer and fall of 2001, flows at the Floradale Bridge site (314SYF) was dominated with effluent from the Lompoc WWTP.
QAPP Information:	SWAMP QAPP (Puckett et al., 2002)
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Sloans Canyon Creek**
Water Body ID: **CAR3141004020020124144851**
Water Body Type: **River & Stream**

DECISION ID **53218** **Region 3**
Sloans Canyon Creek

Pollutant: **Chlorophyll-a**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the eleven samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the eleven samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53218, Chlorophyll-a **Region 3**
Sloans Canyon Creek

LOE ID: 48809

Pollutant: Chlorophyll-a
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314 Santa ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**53226**	**Region 3**
Sloans Canyon Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two nitrate samples and one of the 11 nitrate / nitrite samples exceed the water quality objective for

municipal and domestic supply use (i.e. drinking water). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

In addition, samples (collected in between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Two of the two nitrate samples and 10 of the 11 nitrate / nitrite samples exceed the evaluation guideline. However, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two nitrate samples and one of the 11 nitrate / nitrite samples exceed the water quality objective for municipal and domestic supply use (i.e. drinking water) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Two of the two nitrate samples and 10 of the 11 nitrate / nitrite samples exceed the evaluation guideline. However, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations) and therefore these data are not used alone as the basis of a decision.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53226, Nitrate **Region 3**

Sloans Canyon Creek

LOE ID:	48811
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314 Santa ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53226, Nitrate **Region 3**

Sloans Canyon Creek

LOE ID:	48812
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314DDE Tributary to Santa Ynez River at W. Central Ave]

Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53226, Nitrate **Region 3**

Sloans Canyon Creek

LOE ID:	48810
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314DDE Tributary to Santa Ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53226, Nitrate **Region 3**

Sloans Canyon Creek

LOE ID:	48813
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314DDE Tributary to Santa Ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52421**	**Region 3**
Sloans Canyon Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial

uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 11 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52421, Oxygen, Dissolved **Region 3**

Sloans Canyon Creek

LOE ID:	48815
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314 Santa ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52421, Oxygen, Dissolved **Region 3**

Sloans Canyon Creek

LOE ID:	48814
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314 Santa ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **53237** **Region 3**

Sloans Canyon Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight of the nine unionized ammonia samples exceed the water quality objective for unionized ammonia set to protect aquatic life. However, zero of the 11 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the nine unionized ammonia samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53237, Ammonia **Region 3**

Sloans Canyon Creek

LOE ID:	48807
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314DDE Tributary to Santa ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53237, Ammonia **Region 3**

Sloans Canyon Creek

LOE ID:	48808
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 8 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314DDE Tributary to Santa Ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	53221	Region 3
Sloans Canyon Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Six of the 11 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 11 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53221, Turbidity	**Region 3**
Sloans Canyon Creek	

LOE ID:	48820
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314 Santa ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 53223 Region 3

Sloans Canyon Creek

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Seven of the 11 samples exceed the water quality objective for Warm Freshwater Habitats, and eight of the 11 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Seven of the 11 samples exceed the water quality objective for Warm Freshwater Habitats, and eight of the 11 samples exceed the water quality objectives for Drinking Water and Recreation. These exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53223, pH Region 3

Sloans Canyon Creek

LOE ID:	48819
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314 Santa ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53223, pH **Region 3**

Sloans Canyon Creek

LOE ID:	48818
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 8 of 11 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314 Santa ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53223, pH **Region 3**

Sloans Canyon Creek

LOE ID:	48816
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 8 of 11 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314DDE Tributary to Santa Ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 53223, pH **Region 3**

Sloans Canyon Creek

LOE ID:	48817
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sloans Canyon Creek to determine beneficial use support and results are as follows: 8 of 11 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sloans Canyon Creek was collected at 1 monitoring site [314 Santa ynez River at W. Central Ave]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Miguelito Creek**
Water Body ID: **CAR3141004020020124141622**
Water Body Type: **River & Stream**

DECISION ID **38465** **Region 3**
San Miguelito Creek

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 24 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of the 24 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38465, Chloride **Region 3**
San Miguelito Creek

LOE ID: 51935

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 5 of 8 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38465, Chloride **Region 3**

San Miguelito Creek

LOE ID:	9740
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 9 of 16 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37841** **Region 3**

San Miguelito Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 24 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of the 24 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37841, Sodium **Region 3**

San Miguelito Creek

LOE ID:	9757
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 11 of 16 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37841, Sodium **Region 3**

San Miguelito Creek

LOE ID:	51955
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	6

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37873**	**Region 3**
San Miguelito Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 37 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twenty of the 37 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37873, Temperature, water **Region 3**

San Miguelito Creek

LOE ID:	51994
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37873, Temperature, water **Region 3**

San Miguelito Creek

LOE ID:	49025
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37873, Temperature, water **Region 3**

San Miguelito Creek

LOE ID:	13100
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37873, Temperature, water **Region 3**

San Miguelito Creek

LOE ID:	13063
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 7 of 16 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37641 Region 3

San Miguelito Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Twenty-seven of the 37 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Twenty-two of the 37 samples exceed the water quality objectives for Agricultural Supply, Drinking Water, and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-seven of the 37 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Twenty-two of the 37 samples exceed the water quality objectives for Agricultural Supply, Drinking Water, and Recreation. All of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37641, pH Region 3

San Miguelito Creek

LOE ID:	11485
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 13 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11486
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 14 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11484
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 14 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11502
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 14 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11501
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 14 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11524
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11522
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH — Region 3

San Miguelito Creek

LOE ID:	11523
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH — Region 3

San Miguelito Creek

LOE ID:	49022
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	49021
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	49020
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	49007
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11505
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11503
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 13 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11521

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	11525
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	49005
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]

Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	49006
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	51954
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	51992
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	52016
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	52052

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	52031
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37641, pH **Region 3**

San Miguelito Creek

LOE ID:	52013
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39682** **Region 3**

San Miguelito Creek

Pollutant: **Ammonia**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Six LOEs summarize unionized ammonia data in which one of the 33 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 36 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 33 samples exceed the water quality objective for unionized ammonia and zero of the 36 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39682, Ammonia **Region 3**

San Miguelito Creek

LOE ID:	9726
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39682, Ammonia **Region 3**

San Miguelito Creek

LOE ID:	9724
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39682, Ammonia **Region 3**

San Miguelito Creek

LOE ID:	9725
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39682, Ammonia **Region 3**

San Miguelito Creek

LOE ID:	48930
Pollutant:	Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39682, Ammonia **Region 3**

San Miguelito Creek

LOE ID:	48929
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39682, Ammonia **Region 3**

San Miguelito Creek

LOE ID:	48928
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39682, Ammonia **Region 3**

San Miguelito Creek

LOE ID:	52033
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-7/21/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39682, Ammonia **Region 3**

San Miguelito Creek

LOE ID:	51956
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-7/21/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39682, Ammonia **Region 3**

San Miguelito Creek

LOE ID:	51995
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38526** **Region 3**

San Miguelito Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38526, Boron **Region 3**

San Miguelito Creek

LOE ID:	51920
Pollutant:	Boron

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38526, Boron **Region 3**

San Miguelito Creek

LOE ID:	9739
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38246**	**Region 3**
San Miguelito Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 36 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 36 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38246, Chlorophyll-a — Region 3

San Miguelito Creek

LOE ID:	48946
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38246, Chlorophyll-a — Region 3

San Miguelito Creek

LOE ID:	48945
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38246, Chlorophyll-a **Region 3**

San Miguelito Creek

LOE ID:	13064
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38246, Chlorophyll-a **Region 3**

San Miguelito Creek

LOE ID:	9741
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38246, Chlorophyll-a **Region 3**

San Miguelito Creek

LOE ID:	9742
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38246, Chlorophyll-a **Region 3**

San Miguelito Creek

LOE ID:	13079
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38246, Chlorophyll-a **Region 3**

San Miguelito Creek

LOE ID:	51973
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38246, Chlorophyll-a **Region 3**

San Miguelito Creek

LOE ID:	52034
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **48824** **Region 3**

San Miguelito Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Four of 8 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 8 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48824, Escherichia coli (E. coli) **Region 3**

San Miguelito Creek

LOE ID:	52015
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**53480**	**Region 3**
San Miguelito Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53480, Nitrogen, Nitrite **Region 3**

San Miguelito Creek

LOE ID:	51953
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38247** **Region 3**

San Miguelito Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 37 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 37 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38247, Specific Conductivity **Region 3**

San Miguelito Creek

LOE ID:	51936
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when

	conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38247, Specific Conductivity **Region 3**

San Miguelito Creek

LOE ID:	11504
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38247, Specific Conductivity **Region 3**

San Miguelito Creek

LOE ID:	11483
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38247, Specific Conductivity **Region 3**

San Miguelito Creek

LOE ID:	48947
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**37710**	**Region 3**
San Miguelito Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Four of the 37 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 2 of the 37 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 37 samples exceed the evaluation guideline for Cold Freshwater Habitat and 2 of the 37 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37710, Turbidity **Region 3**

San Miguelito Creek

LOE ID:	13062
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37710, Turbidity — Region 3

San Miguelito Creek

LOE ID:	49023
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37710, Turbidity — Region 3

San Miguelito Creek

LOE ID:	13098
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37710, Turbidity **Region 3**

San Miguelito Creek

LOE ID:	13061
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37710, Turbidity **Region 3**

San Miguelito Creek

LOE ID:	13099
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37710, Turbidity **Region 3**

San Miguelito Creek

LOE ID:	49024
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37710, Turbidity **Region 3**

San Miguelito Creek

LOE ID:	51993
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the

	criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37710, Turbidity **Region 3**

San Miguelito Creek

LOE ID:	51767
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38262** **Region 3**

San Miguelito Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Six of 23 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 2 of 23 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 23 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38262, Fecal Coliform **Region 3**

San Miguelito Creek

LOE ID:	11468
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38262, Fecal Coliform **Region 3**

San Miguelito Creek

LOE ID:	11469
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38262, Fecal Coliform **Region 3**

San Miguelito Creek

LOE ID:	52030
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38262, Fecal Coliform **Region 3**

San Miguelito Creek

LOE ID:	52014
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37652** **Region 3**

San Miguelito Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use and this use is fully supported. However, three of the 27 nitrate samples and 12 of the 20 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. In addition, four of the 11 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat and 13 of the 20 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. However, the Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing for Cold and Warm Freshwater Habitat. The use rating for these data is set to insufficient information because the following supporting evidence does not make a strong case for presence of or risk of eutrophic conditions. 1) Dissolved oxygen for this water body ranged from 6.41 mg/L to 22.65 mg/L, once exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and often exceeding the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2) Water column chlorophyll a concentration reached but did not exceed the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 3) Floating mats reached 55 % cover once, which exceeds the screening threshold of 50% (R3 NNE Technical Report, 2010). 4) Using the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007), site-specific data from this waterbody does not predict benthic algal contribution to oxygen deficit, algae biomass, or benthic chlorophyll a concentrations at levels that exceed screening thresholds (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. However, there is insufficient supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 27 nitrate samples and 12 of the 20 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	52049
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	52048
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the

	criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	52012
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	52011
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	51975

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	51937
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	51974
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	48948
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	48965
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	48966
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	48967
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	48984
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	9756
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	9755
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	48986

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37652, Nitrate **Region 3**

San Miguelito Creek

LOE ID:	48985
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	12

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**38270**	**Region 3**
San Miguelito Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 37 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. Two of the 37 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twelve of the 37 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	49004
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	49003
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	13331
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable

water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]

Temporal Representation: Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID: 48987

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 12
Number of Exceedances: 11

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).

Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]

Temporal Representation: Data was collected over the time period 1/24/2008-12/16/2008.

Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	13082
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	49002
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the

	criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MCM - San Miguelito Creek below WWTP outfall]
Temporal Representation:	Data was collected over the time period 1/24/2008-12/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	13330
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	13329
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	13314

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	13083
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	13081
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]

Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	13080
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected on a single day 7/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	51976
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	51977
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	52051
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38270, Oxygen, Dissolved **Region 3**

San Miguelito Creek

LOE ID:	52050

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG-San Miguelito Creek at W. North Ave]
Temporal Representation:	Data was collected over the time period 1/31/2008-9/22/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38269**	**Region 3**
San Miguelito Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and three water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total

samples are available to assess toxic effects in water samples. Two of the five water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the five samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38269, Toxicity **Region 3**

San Miguelito Creek

LOE ID:	80340
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. Two of the three samples exhibited significant toxicity. Samples exhibited significant toxicity to growth of Selenastrum capricornutum (9/23/2008 and 3/25/2008).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at San Miguelito Creek @ mouth @ treatment plant.
Temporal Representation:	The samples were collected from in January, March and September of 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38269, Toxicity **Region 3**

San Miguelito Creek

LOE ID:	57949
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. Two of the three samples exhibited significant toxicity. Samples exhibited significant toxicity to growth of Selenastrum capricornutum (9/23/2008 and 3/25/2008).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at San Miguelito Creek @ mouth @ treatment plant.
Temporal Representation:	The samples were collected from in January, March and September of 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38269, Toxicity **Region 3**

San Miguelito Creek

LOE ID:	24285
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG001 - San Miguelito Creek at North Ave]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38269, Toxicity **Region 3**

San Miguelito Creek

LOE ID:	24284
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG001 - San Miguelito Creek at North Ave]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38269, Toxicity **Region 3**

San Miguelito Creek

LOE ID:	24280
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG001 - San Miguelito Creek at North Ave]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38269, Toxicity **Region 3**

San Miguelito Creek

LOE ID:	24281
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG001 - San Miguelito Creek at North Ave]

Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41897 **Region 3**

San Miguelito Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One sample exceeded the water quality objective for Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use the other water sample collected on 12/10/2001 because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One sample exceeded the water quality objective for Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41897, Chlorpyrifos **Region 3**

San Miguelito Creek

LOE ID:	16278
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Miguelito Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG001 - San Miguelito Creek at North Ave]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41897, Chlorpyrifos **Region 3**

San Miguelito Creek

LOE ID:	16279
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Miguelito Creek to determine beneficial use support and results are as follows:

	1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG001 - San Miguelito Creek at North Ave]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41929**	**Region 3**
San Miguelito Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Neither of the 2 samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41929, Diazinon **Region 3**

San Miguelito Creek

LOE ID:	16653
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG001 - San Miguelito Creek at North Ave]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41929, Diazinon **Region 3**

San Miguelito Creek

LOE ID:	16652
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Miguelito Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Miguelito Creek was collected at 1 monitoring site [314MIG001 - San Miguelito Creek at North Ave]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Shuman Canyon Creek**
Water Body ID: **CAR3130004120020124144205**
Water Body Type: **River & Stream**

DECISION ID **32532** **Region 3**
Shuman Canyon Creek

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: The data and information in the administrative record supports this change in the original listing recommendation. There was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.

The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek. The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32532, Sedimentation/Siltation **Region 3**
Shuman Canyon Creek

LOE ID: 1986

Pollutant: Sedimentation/Siltation
LOE Subgroup: Testimonial Evidence
Matrix: Not Specified
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: The correction is requested for San Antonio Creek (South Coast Watershed)

	Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek. The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.See file: "FS - Correction-San Antonio Creek.doc" for further information.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	3.0 miles.
Temporal Representation:	Correction Submittal on 6/14/2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Casmalia Canyon Creek**
Water Body ID: **CAR3130004020020117145508**
Water Body Type: **River & Stream**

DECISION ID **44324** **Region 3**
Casmalia Canyon Creek

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: The data and information in the administrative record supports this change in the original listing recommendation. There was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.

The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek. The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44324, Sedimentation/Siltation **Region 3**
Casmalia Canyon Creek

LOE ID: 1985

Pollutant: Sedimentation/Siltation
LOE Subgroup: Pollutant-Water
Matrix: Not Specified
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Wildlife Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality:	The correction is requested for San Antonio Creek (South Coast Watershed) Sedimentation/Siltation. This water body was incorrectly assigned to a sedimentation/siltation problem. The correct water bodies are Shuman Canyon Creek and Casmalia Canyon Creek. The 303(d) List Table should be revised to remove San Antonio Creek (South Coast Watershed) for Sedimentation/Siltation and add Casmalia Canyon Creek (4.5 miles) and Shuman Canyon Creek (3.0 miles) (313004) for Sedimentation/Siltation. The original listing recommendation originated with Regional Board staff, however there was a misunderstanding of the applicable water body recommended for listing by staff. This change will correct that mistake.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sampling site was 4.5 miles.
Temporal Representation:	Correction Submittal on 6/14/2004.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name:	**San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)**
Water Body ID:	**CAR3130001020020918211049**
Water Body Type:	**River & Stream**

DECISION ID **39554** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Ammonia**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.1 and 4.10 of the Listing Policy. Under section 4.10, a water segment shall be removed from the CWQ section 303(d) list if the impacts to the water segment are no longer observed based at least 3 years of data, there is no evidence of adverse biological impact and the improving water quality trend meets water quality standards.

Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize total ammonia data in which zero of the 142 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Eight LOEs summarized unionized ammonia data and an improvement in the water quality condition is observed when comparing the data collected prior to 2007 and since 2007. Four LOEs (LOEs 51702 and 51703, 51713, 51714), summarize data collected from three stations between January 2007 and June 2010. Those data show that zero of 51 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. This is a complete recovery in terms of unionized ammonia concentrations in this creek where samples collected between 2001and 2006 exceeded the water quality objective in 16 of the 86 samples. There is also toxicity data assessed for this water segment and although there is no evidence of impairment there is an insufficient number of samples to determine if the aquatic life uses are fully supported (a minimum of 16 samples is needed).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 51 samples collected in the most recent 3 years exceeded the water quality objective for unionized ammonia set to protect aquatic life and zero of the 142 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.10 of the Listing Policy, the impacts due to nitrite are no longer observed.
5. There is no evidence of a negative biological impact (based on toxicity data) in this water segment.
6. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded when looking at the most recent 3 years of data.

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9647
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 7 of 30 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West].
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9694
Pollutant:	Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 9 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9660
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 7 of 30 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West].
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9692
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9646
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9693
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 9 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West].
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51713
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51714
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135,

	313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51625
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51624
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51703
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39554, Ammonia **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51702
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 34027 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.1 and 4.10 of the Listing Policy. Under section 4.10, a water segment shall be removed from the CWQ section 303(d) list if the impacts to the water segment are no longer observed based at least 3 years of data, there is no evidence of adverse biological impact and the improving water quality trend meets water quality standards. Five lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE (1984) was the basis of the original decision to place this water segment - pollutant combination on the CWA section 303(d) List. That decision was based on exceedances of the water quality objective for Municipal & Domestic Supply (i.e. drinking water). Two LOEs summarized more recent data from three stations and zero of the 56 samples collected between January 2007 and June 2010 exceed the water quality objective for drinking water and for agricultural supply uses. This is a complete recovery in terms of nitrite concentrations in this creek where samples collected between 2001and 2006 exceeded the water quality objective in 5 of the 52 samples. There is also toxicity data assessed for this water segment and although there is no evidence of impairment there is an insufficient number of samples to determine if the aquatic life uses are fully supported (a minimum of 16 samples is needed). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 56 samples collected in the most recent 3 years exceeded the water quality objectives for drinking water and agricultural uses. These do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.10 of the Listing Policy, the impacts due to nitrite are no longer observed. 5. There is no evidence of a negative biological impact (based on toxicity data) in this water segment. 6. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded based on the most recent three years of data and there is no evidence of a negative biological impact.

Line of Evidence (LOE) for Decision ID 34027, Nitrogen, Nitrite Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51680
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34027, Nitrogen, Nitrite **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51679
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34027, Nitrogen, Nitrite **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	80386
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Drinking Water MCL for nitrite = 1 mg/L (Title 22 Table 64431-A Primary (inorganics) 64444A (organics)).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]

Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34027, Nitrogen, Nitrite **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	80385
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Drinking Water MCL for nitrite = 1 mg/L (Title 22 Table 64431-A Primary (inorganics) 64444A (organics)).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34027, Nitrogen, Nitrite **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	1984
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	52
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Five out of 52 samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Drinking Water MCL for nitrite = 1 mg/L (Title 22 Table 64431-A Primary (inorganics) 64444A (organics)).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from four sites. Exceedances were detected in samples collected from one (site #313SAI) of the four sites.
Temporal Representation:	Samples were collected from January 2001 to March 2003.
Environmental Conditions:	The water body is located in the San Antonio hydrologic unit, San Antonio hydrologic subarea. Monitoring sites are located at San Antonio Creek at Rancho de las Flores Bridge and Highway 135 (313SAB), San Antonio Creek at Railroad Bridge, upstream of lagoon (313SAC), San Antonio Creek at San Antonio Road East (313SAE), and San Antonio Creek at San Antonio Road West (313SAI).
QAPP Information:	CCAMP, SWAMP QAPP.
QAPP Information Reference(s):	

DECISION ID 39170 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Delist from 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Flaws in original listing
TMDL Name:	San Antonio Creek Chlorpyrifos
TMDL Project Code:	1010
Date TMDL Approved by USEPA:	06/04/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. There are two flaws in the original decision and the LOEs from the 2010 assessment cycle. 1. LOEs 16053 and 16054 summarize chlorpyrifos concentrations in pore water pore water sample did exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. The single pore water sample collected on March 31, 2004 contributed to the original listing during the 2010 listing

cycle. This decision does not use pore water samples in the exceedance count.
2. LOEs 16276 and 16277 incorrectly show that one of eight samples exceed the guideline, however, it should be corrected to state that one of the one samples exceed the evaluation guideline. This is because two of the samples were laboratory duplicates and should not have been counted and five samples were reported as 'non-detect' but the method detection and reporting limits greater than the evaluation guideline in which case the results could not be quantified with the level of certainty required by the Listing Policy. These five sample should not have been counted.

In summary, the previous decision was based on an incorrect accounting of the data and included a pore water sample in the exceedance count that led to the incorrect decision to add this water segment - pollutant combination to the CWA section 303(d) List. The previous decision should have stated that only one of one water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
In the 2014 assessment cycle for new LOEs are added to this decision.

In the 2014 assessment cycle four additional LOEs are added to this decision. LOEs 47646 and 47731 summarize a single pore water sample but result was not counted as a sample or an exceedance because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. LOEs 57628 and 57629 summarize a single sediment sample which did not exceed the evaluation guideline (Amweg and Weston, 2007) set to protect aquatic life. In summary, zero of one sediment samples exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
In the 2014 assessment cycle four new LOEs are added to this decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of one water samples exceeded the evaluation guideline and zero of one sediment samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The previous decision was based on an incorrect accounting of the data and included a pore water sample in the exceedance count that led to the incorrect decision to add this water segment - pollutant combination to the CWA section 303(d) List. This decision is now being corrected and includes new sediment data.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded and the original decision was based on a faulty accounting of the samples and exceedances.

Line of Evidence (LOE) for Decision ID 39170, Chlorpyrifos **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	47731
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39170, Chlorpyrifos **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	47646
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39170, Chlorpyrifos **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16276
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39170, Chlorpyrifos **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16277
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring

	includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39170, Chlorpyrifos **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16054
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39170, Chlorpyrifos **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16053
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39170, Chlorpyrifos **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57629
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39170, Chlorpyrifos **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57628
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 34026 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess pollutant. One hundred and ten (110) of the 135 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred and ten (110) of the 135 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34026, Boron **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9661
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 23 of 30 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34026, Boron **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9707
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 40 of 49 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34026, Boron **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51638
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 40 of 41 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34026, Boron **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51639
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39215 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One hundred twenty-nine (129) of the 135 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred twenty-nine (129) of the 135 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39215, Chloride Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51641
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 12 of 15 samples exceed the criterion for Chloride.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39215, Chloride **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51640
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39215, Chloride **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9708
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	49
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 49 of 49 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39215, Chloride **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9662
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 27 of 30 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39567 **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E.coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty three of 80 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 25 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty three of 80 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39567, Escherichia coli (E. coli) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11466
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 11 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2005-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39567, Escherichia coli (E. coli) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11467
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2005-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39567, Escherichia coli (E. coli) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51665
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39567, Escherichia coli (E. coli) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51664
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	41
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 7 of 41 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39568 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Twenty nine of 140 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 3 of 140 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty nine of the 140 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39568, Fecal Coliform **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51663
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39568, Fecal Coliform **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51683
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39568, Fecal Coliform **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51682
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39568, Fecal Coliform **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51662
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39568, Fecal Coliform **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11430
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 12 of 55 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39568, Fecal Coliform **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11431

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39568, Fecal Coliform **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11378
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	29
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 13

	of 29 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 12/10/2000-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39568, Fecal Coliform **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11379
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	29
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 3 of 29 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period

	exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 12/10/2000-3/11/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39999 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Fifty-seven of the 151 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. Eighteen of the 151 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. It should be noted that all of the dissolved oxygen exceedances (low dissolved oxygen measurements) occurred at stations in the lower reaches of the creek (stations 313SAI and 313SAC). There are zero exceedances of the dissolved oxygen water quality objectives at the station 313SAB. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-seven of the 151 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

	indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13295
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 38 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13294
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 38 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13293
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 6 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13222
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135,

	313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13221
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13220
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13259
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13258
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13257
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13256
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13237
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13292
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 21 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and

	Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51746
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 33 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51745
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51744
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 25 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51735
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 10 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51750
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 33 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51751
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek

	(313) to determine beneficial use support and results are as follows: 9 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51749
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39999, Oxygen, Dissolved **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51747
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 9 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39095** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One hundred thirty-one (131) of the 135 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred thirty-one (131) of the 135 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39095, Sodium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51699
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 14 of 15 samples exceed the criterion for Sodium.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39095, Sodium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51698
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39095, Sodium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9677
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 27 of 30 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39095, Sodium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9723
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	49
Number of Exceedances:	49
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 49 of 49 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39930 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status and an adverse biological affect must also be reported to support the pollutant decision. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39930, Arsenic **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15675
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39930, Arsenic **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15676
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39930, Arsenic **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15645
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39930, Arsenic **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15646
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39930, Arsenic **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57606
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39930, Arsenic **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57607
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52478** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	Benthic Community Effects is being considered for placement on the section 303(d) list under section

Conclusion:	3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. Both samples exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Both samples had IBI scores below 40 which indicates poor water quality for this area. However, both samples were collected from the same station. This information is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 52478, Benthic Community Effects **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57613
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores are 39 or below and are therefore are below the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in this waterbody resulting in the collection of more than one sample at the San Antonio Creek station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the 2007 sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The two RWB samples included in this assessment have the following IBI scores: The 2005 sample IBI score was 20 and the 2007 sample IBI score was 11.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.

Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 313SAIxxx-San Antonio Creek at San Antonio Rd West.
Temporal Representation:	Surveys done on April 28, 2005 and April 12, 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 51562 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51562, Bifenthrin Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57614
Pollutant:	Bifenthrin

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51562, Bifenthrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57615
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39878** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39878, Cadmium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57621
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 39878, Cadmium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57620
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39878, Cadmium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15491
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39878, Cadmium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15460
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39878, Cadmium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15461
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39878, Cadmium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15478
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51327** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51327, Chlordane **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57622
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51327, Chlordane **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57623
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39340 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Five of the 142 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. It should be noted that all five exceedances occurred at the 313SAI station. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 142 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39340, Chlorophyll-a Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51716
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples

	exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39340, Chlorophyll-a **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51718
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39340, Chlorophyll-a **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51715
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39340, Chlorophyll-a **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51717
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]

Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39340, Chlorophyll-a **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9709
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39340, Chlorophyll-a **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9810
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39340, Chlorophyll-a **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9691
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39340, Chlorophyll-a **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9678
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39329 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Six lines of evidence are available in the administrative record to assess this pollutant. None of the four samples exceed the evaluation guideline (MacDonald et al. 2000) applied to protect for aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the four samples exceed the evaluation guideline (MacDonald et al. 2000) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39329, Chromium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16100
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39329, Chromium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15933
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39329, Chromium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16101
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39329, Chromium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15932
Pollutant:	Chromium (total)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39329, Chromium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57631
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39329, Chromium **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57630
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39984 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39984, Copper Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16846
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39984, Copper **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16845
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39984, Copper **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16813
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39984, Copper **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16812
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39984, Copper **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57635
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39984, Copper **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57636
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51563 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51563, Cyfluthrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57637
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51563, Cyfluthrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57638
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51564 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality

objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51564, Cyhalothrin, Lambda **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57643
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA.

	Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51564, Cyhalothrin, Lambda **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57642
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51565	Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51565, Cypermethrin	**Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57644
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed,

	Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51565, Cypermethrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57649
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51331 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51331, DDD (Dichlorodiphenyldichloroethane) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57650
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51331, DDD (Dichlorodiphenyldichloroethane) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57651
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51332** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51332, DDE (Dichlorodiphenyldichloroethylene) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57657
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51332, DDE (Dichlorodiphenyldichloroethylene) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57658
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51333 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for the DDT isomer or for the sum of all DDX isomers (i.e. total DDT) for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51333, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57742
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51333, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57659
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]

Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51333, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57665
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51333, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57685
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51334 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of

the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51334, Deltamethrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57667
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51334, Deltamethrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57666
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	39214	Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Note that the line of evidence (number 16650), stated that zero of eight samples exceeded the evaluation guideline, however, two samples were mistakenly included in the total count and they should not have been because they were lab replicates. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). Zero of 2 sediment samples (pore water) exceeded the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39214, Diazinon	**Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57676
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39214, Diazinon **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57675
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39214, Diazinon **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	47662
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho

	Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39214, Diazinon **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	47678
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 5/21/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39214, Diazinon **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16651

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39214, Diazinon **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16650
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39214, Diazinon **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16692
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39214, Diazinon **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16691
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

of Fish and Game

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39795 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39795, Dieldrin Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16512

Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39795, Dieldrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16511
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39795, Dieldrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16541
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39795, Dieldrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16542
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39795, Dieldrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57677

Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39795, Dieldrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57577
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39810 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39810, Endrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57578
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39810, Endrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57579
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39810, Endrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16595
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39810, Endrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16389
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin

	is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39810, Endrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16594
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39810, Endrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16376
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 51566 **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and

the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51566, Esfenvalerate/Fenvalerate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57585
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51566, Esfenvalerate/Fenvalerate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57586
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51654 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51654, Fenpropathrin Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57587
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51654, Fenpropathrin **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57590
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39735** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39735, Lead **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17154
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39735, Lead **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17171
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39735, Lead **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17172
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39735, Lead **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17141
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39735, Lead **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57592
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39735, Lead **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57591
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51335** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support

rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51335, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57593
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]

Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51335, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57594
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39537** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant: **Mercury**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39537, Mercury **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57595
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39537, Mercury **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57596
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1

	monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39537, Mercury **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17208
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39537, Mercury **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17207
Pollutant:	Mercury

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39537, Mercury **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17238
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39537, Mercury **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17225
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]

Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 51337 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51337, Methyl Parathion Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57597
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51337, Methyl Parathion **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57598
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39549 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39549, Nickel **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17112
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39549, Nickel **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16904

Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39549, Nickel **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17111
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39549, Nickel **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16891
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39549, Nickel **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57599
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39549, Nickel **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57600

Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51338 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the

Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51338, PCBs (Polychlorinated biphenyls) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57601
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 313SAIxxx (313SAI-San Antonio Creek at San Antonio Road West).
Temporal Representation:	The samples were collected on 6/10/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51567	Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51567, Permethrin, total **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57740
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51567, Permethrin, total **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57741
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39584 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Five lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the 139 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of the 139 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39584, Specific Conductivity Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11396
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39584, Specific Conductivity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11432
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	9

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 9 of 57 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39584, Specific Conductivity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11394
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39584, Specific Conductivity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51658
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39584, Specific Conductivity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51659
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39096** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant: **Temperature, water**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Eight of the 151 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 151 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39096, Temperature, water **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51480
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39096, Temperature, water **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51479
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39096, Temperature, water **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13255
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39096, Temperature, water **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13276
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39096, Temperature, water **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13313
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 2 of 57 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39583 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and two additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in sediment samples. One of the three sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Six LOEs summarize water samples. Six water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in water samples. One of the eight water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the three sediment samples and one of the eight water samples resulted in a significant toxic effect to one or more test organisms. However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	24404
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at

	San Antonio Road West]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	24251
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	24417
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	24430

Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	24405
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 12/10/2001-3/17/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	24418
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as

	follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	80324
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 313SAIxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	80322
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One sample exhibited significant toxicity to Ceriodaphnia dubia survival. Each toxicity test included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). The sample collected on 8/28/08 was reported as having toxic effects to the cell count of S. capricornutum. However, the conductivity of this sample is greater than 1500 uS/cm, the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample (SWAMP guidance for toxicity tests (July 2013)). For this sample, the lab also reported the following comment: Performance in this sample was comparable to the appropriate High EC Control, and therefore apparent toxicity can be attributed solely to high conductivity. Because the toxicity of the sample was evaluated using the wrong control, it is not counted as an exceedance in this LOE. A similar comment was provided by the lab for the sample collected on 1/29/09, which also reported toxic effects to the cell count of S. capricornutum based on the incorrect control sample. The S. capricornutum result from august 2008 is not counted as an exceedance because the conductivity of the sample was greater than the threshold at which a high salinity control should have been used. The January 2009 sample was toxic to C. dubia, it is counted as an exceedance.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 313SAI - San Antonio Creek at San Antonio Road West.
Temporal Representation:	The sample was collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	80323
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did exhibit significant toxicity to Hyalella azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 313SAIxxx.
Temporal Representation:	The sample was collected in June 2008.

Environmental Conditions:
QAPP Information: The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID: 57687

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity. The sample did exhibit significant toxicity to Hyalella azteca survival. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference: Statewide Stream Pollution Trends Study 2008

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference: Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation: The sample was collected at station 313SAIxxx.
Temporal Representation: The sample was collected in June 2008.
Environmental Conditions:
QAPP Information: The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID: 57688

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 313SAIxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39583, Toxicity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57686
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One sample exhibited significant toxicity to Ceriodaphnia dubia survival. Each toxicity test included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided). The sample collected on 8/28/08 was reported as having toxic effects to the cell count of S. capricornutum. However, the conductivity of this sample is greater than 1500 uS/cm, the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample (SWAMP

	guidance for toxicity tests (July 2013)). For this sample, the lab also reported the following comment: Performance in this sample was comparable to the appropriate High EC Control, and therefore apparent toxicity can be attributed solely to high conductivity. Because the toxicity of the sample was evaluated using the wrong control, it is not counted as an exceedance in this LOE. A similar comment was provided by the lab for the sample collected on 1/29/09, which also reported toxic effects to the cell count of S. capricornutum based on the incorrect control sample. The S. capricornutum result from august 2008 is not counted as an exceedance because the conductivity of the sample was greater than the threshold at which a high salinity control should have been used. The January 2009 sample was toxic to C. dubia, it is counted as an exceedance.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 313SAI - San Antonio Creek at San Antonio Road West.
Temporal Representation:	The sample was collected in August 2008 and January 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID 39106 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 315 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), used to interpret the water quality objective for turbidity. The evaluation guideline for Cold Freshwater Habitat is not relevant for this water segment because, it is specific to steelhead trout. And, according to the reference Steelhead/rainbow trout (Oncorhynchus mykiss) resources south of Golden Gate, California (Becker, G.s. and I.J. Reining, 2008), steelhead trout are absent from this creek. Therefore the use rating for Cold Freshwater Habitat is set to insufficient information and this rating will not be included in the CWA section 305(b) Condition Report. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty of the 315 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51477
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51478
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51482
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 15 samples

	exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51481
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13312
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 10 of 49 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13240
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 7 of 30 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13239
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for

	San Antonio Creek (313) to determine beneficial use support and results are as follows: 7 of 30 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13275
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 7/18/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13274
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 7/18/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39106, Turbidity **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	13311
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 10 of 49 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39815** **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39815, Zinc **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17740
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39815, Zinc **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17721
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39815, Zinc **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17720
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39815, Zinc **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17741
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39815, Zinc **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57691
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39815, Zinc **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	57692
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge) was collected at 1 monitoring site [San Antonio Creek at San Antonio Rd West - 313SAIxxx]
Temporal Representation:	Data was collected on a single day 6/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	39876	Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty-five lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Two of the 149 samples exceed the water quality objectives for Agricultural Supply, 7 of the 149 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, 5 of the 149 samples exceeded the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 149 samples exceed the water quality objectives for Agricultural Supply, 7 of the 149 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, 5 of the 149 samples exceeded the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39876, pH	**Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51753
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51752
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51748
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51666
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51476
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51696
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51645
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51646
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51697
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51685

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51681
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51684
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11397
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11413
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11395
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11452
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 6 of 57 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11433
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 57 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11412
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11451
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 2 of 57 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11450
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 2 of 57 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11449
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 2 of 57 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11448
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	57
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 6 of 57 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11536
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11537
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11554
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11553

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11552
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11416
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11414
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39876, pH **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	11415
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 7/18/2001-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39556 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (being addressed by action other than TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
Expected Attainment Date:	2016
Implementation Action Other than TMDL:	USEPA's six elements are addressed as follows: ELEMENT 1. IDENTIFICATION OF SEGMENT AND STATEMENT OF PROBLEM CAUSING THE IMPAIRMENT. When looking at the most recent 56 samples available in the administrative record, seven of the 56 samples (collected in between January 2007 and June 2010), exceed the water quality objective for the Municipal and Domestic Supply use and each of these exceedances occurred at the upstream station, 313SAB. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. This also violates Section 3.10 of the Listing Policy, showing a declining trend in water quality over the past three

years.

ELEMENT 2.DESCRIPTION OF THE POLLUTION CONTROLS AND HOW THEY WILL ACHIEVE WQS, INCLUDING A DESCRIPTION OF THE POLLUTANT LOADS NEEDED TO MEET WQS AND A DESCRIPTION OF THE REQUIREMENTS UNDER WHICH THE CONTROLS WILL BE IMPLEMENTED.
A single source was identified and eliminated as described in an informational TMDL which has been completed for this pollutant within the San Antonio Creek watershed. The source was an Â“end-of-pipeÂ” discharge originating from an agricultural tile drain system that discharged into San Antonio Creek. The owner of the agricultural operation willfully ceased this discharge by intercepting the discharge at a location within the agricultural operation property, pumping the intercepted water into an impoundment located one-quarter of a mile away from San Antonio Creek, and disconnecting the tile drain system from the pipe that leads to the creek. These pollution controls have eliminated all discharges to San Antonio Creek from this source. See CalWQA references 4282 and 4283.

ELEMENT 3. AN ESTIMATE OR PROJECTION OF THE TIME WHEN WQS WILL BE MET.
The source was eliminated in September 2015 and no surface water has been observed within this segment of San Antonio Creek since the source was eliminated. However, attainment of water quality standards will be confirmed if/when surface water is observed and water quality sampling may be performed.

ELEMENT 4. SCHEDULE FOR IMPLEMENTING POLLUTION CONTROLS.
The source was eliminated in September 2015. All growers in this watershed are enrolled under the Central Coast Region's Conditional Waiver of Waste Discharge Requirements (Agricultural Order No. R3-2012-0011). Staff does not expect any nitrate contamination to be detected in this water segment in the future.

ELEMENT 5. MONITORING PLAN TO TRACK EFFECTIVENESS OF POLLUTION CONTROLS
Current monitoring efforts include monthly site visits by the Region 3 ambient monitoring program (CCAMP) and future additional monitoring by the cooperative monitoring program under the Central Coast Region's Agricultural Order. Monthly site visits are documenting the dry creek bed or, if there is flow in the Creek, will collect nitrate samples to confirm the nitrate source has been eliminated.

ELEMENT 6. COMMITMENT TO REVISE POLLUTION CONTROLS, AS NECESSARY
Staff review data on an ongoing basis by a) reviewing data on the CCAMP websites (www.ccamp.org) which provides summary statistics, scores monitoring stations based on exceedances of the water quality criteria and evaluated change over time (detecting trends in water quality). Staff also reviews annual data reports provided by the cooperative monitoring program under the Central Coast Region's Agricultural Order and this includes a monitoring station in this watershed.

Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: A single nitrate source was identified and has since been eliminated and an informational TMDL has been completed for this pollutant and San Antonio Creek watershed. Therefore, the impairment has been addressed, the water quality standards are being met and there are two monitoring programs in place to track effectiveness.

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.10 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.10, data collected over a minimum of three years are needed to assess a declining trend in water quality.

Twenty lines of evidence are available in the administrative record to assess this pollutant. Zero of the 142 samples exceed the water quality objective for agricultural uses. Eight of the 142 samples exceed the water quality objective for municipal and domestic supply uses (i.e. drinking water). However, when looking at the most recent 56 samples (collected in between January 2007 and June 2010), seven of the 56 samples exceed the water quality objective for municipal and domestic supply uses and therefore show a trend of declining water quality. Each of these exceedances occurred at the upstream station, 313SAB. This violates the anti-degradation component of water quality standards and threatened waters as defined in 40CFR 130.2(j) and pursuant to section 3.10 of the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section

303(d) List. However, there is sufficient justification showing USEPA's six elements have been meet to place this water segment / pollutant combination in the Being addressed by action other than TMDL portion of the CWA 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. When looking at the most recent 56 samples available in the administrative record, seven of the 56 samples (collected in between January 2007 and June 2010),exceed the water quality objective for Municipal and Domestic Supply use and each of these exceedances occurred at the upstream station, 313SAB. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. This also violates Section 3.10 of the Listing Policy, showing a declining trend in water quality over the past three years.
4. A single source was identified and has since been eliminated and an informational TMDL has been completed for this pollutant and San Antonio Creek watershed.
5. Current monitoring efforts are documenting the dry creek bed monthly or will collect nitrate samples if there is flow in the Creek to confirm the source has been eliminated.
6. All growers in this watershed are enrolled under the Central Coast Region's Conditional Waiver of Waste Discharge Requirements (Agricultural Order No. R3-2012-0011).
7. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
8. USEPA's six elements are addressed justifying placement of this water segment / pollutant combination in the Being addressed by action other than TMDL portion of the CWA 303(d) List. The elements and the supporting information are listed below:

ELEMENT 1. IDENTIFICATION OF SEGMENT AND STATEMENT OF PROBLEM CAUSING THE IMPAIRMENT.
When looking at the most recent 56 samples available in the administrative record, seven of the 56 samples (collected in between January 2007 and June 2010), exceed the water quality objective for the Municipal and Domestic Supply use and each of these exceedances occurred at the upstream station, 313SAB. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. This also violates Section 3.10 of the Listing Policy, showing a declining trend in water quality over the past three years.

ELEMENT 2.DESCRIPTION OF THE POLLUTION CONTROLS AND HOW THEY WILL ACHIEVE WQS, INCLUDING A DESCRIPTION OF THE POLLUTANT LOADS NEEDED TO MEET WQS AND A DESCRIPTION OF THE REQUIREMENTS UNDER WHICH THE CONTROLS WILL BE IMPLEMENTED.
A single source was identified and eliminated as described in an informational TMDL which has been completed for this pollutant within the San Antonio Creek watershed. The source was an Â“end-of-pipeÂ” discharge originating from an agricultural tile drain system that discharged into San Antonio Creek. The owner of the agricultural operation willfully ceased this discharge by intercepting the discharge at a location within the agricultural operation property, pumping the intercepted water into an impoundment located one-quarter of a mile away from San Antonio Creek, and disconnecting the tile drain system from the pipe that leads to the creek. These pollution controls have eliminated all discharges to San Antonio Creek from this source. See CalWQA references 4282 and 4283.

ELEMENT 3. AN ESTIMATE OR PROJECTION OF THE TIME WHEN WQS WILL BE MET.
The source was eliminated in September 2015 and no surface water has been observed within this segment of San Antonio Creek since the source was eliminated. However, attainment of water quality standards will be confirmed if/when surface water is observed and water quality sampling may be performed.

ELEMENT 4. SCHEDULE FOR IMPLEMENTING POLLUTION CONTROLS.
The source was eliminated in September 2015. All growers in this watershed are enrolled under the Central Coast Region's Conditional Waiver of Waste Discharge Requirements (Agricultural Order No. R3-2012-0011). Staff does not expect any nitrate contamination to be detected in this water segment in the future.

ELEMENT 5. MONITORING PLAN TO TRACK EFFECTIVENESS OF POLLUTION CONTROLS
Current monitoring efforts include monthly site visits by the Region 3 ambient monitoring program (CCAMP) and future additional monitoring by the cooperative monitoring program under the Central

Coast Region's Agricultural Order. Monthly site visits are documenting the dry creek bed or, if there is flow in the Creek, will collect nitrate samples to confirm the nitrate source has been eliminated.

ELEMENT 6. COMMITMENT TO REVISE POLLUTION CONTROLS, AS NECESSARY
Staff review data on an ongoing basis by a) reviewing data on the CCAMP websites (www.ccamp.org) which provides summary statistics, scores monitoring stations based on exceedances of the water quality criteria and evaluated change over time (detecting trends in water quality). Staff also reviews annual data reports provided by the cooperative monitoring program under the Central Coast Region's Agricultural Order and this includes a monitoring station in this watershed.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List.

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9663
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9811
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9710
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	9676
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Barbara (SantaBarb) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 3 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAE-San Antonio Creek at San Antonio Road East, 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/18/2001-3/17/2002. Santa Barbara Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51643
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51644
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51731

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 14 of 15 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51732
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	14

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 14 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51733
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 37 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51734
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 14 of 15 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51730
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 37 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]

Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51661
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51628
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51719
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 37 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51642
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]

Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51728
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 37 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51729
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 14 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Barbara Watershed Rotation field data 2008-2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAB-San Antonio Creek at Rancho de las Flores Bridge and Highway 135, 313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon]
Temporal Representation:	Data was collected over the time period 1/31/2008-12/9/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39556, Nitrate **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	51660
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected over the time period 1/4/2007-6/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39929 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39929, Anthracene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15609
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39929, Anthracene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15848
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39929, Anthracene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15835
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39929, Anthracene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15608
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39887 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39887, Benzo(a)anthracene Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15545
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39887, Benzo(a)anthracene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15514
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as

	follows: 0 of 2 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39887, Benzo(a)anthracene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15544
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39887, Benzo(a)anthracene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15527
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39843 **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39843, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15375
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39843, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15376
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39843, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15394
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39843, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15393
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39804 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39804, Chrysene (C1-C4) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15985
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39804, Chrysene (C1-C4) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16003
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39804, Chrysene (C1-C4) **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	15986
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39804, Chrysene (C1-C4) Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16016
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39797 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39797, Fluoranthene Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16427
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39797, Fluoranthene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16428
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39797, Fluoranthene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16457
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39797, Fluoranthene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	16458
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39798 **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39798, Fluorene — Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17338
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39798, Fluorene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17309
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39798, Fluorene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17339
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39798, Fluorene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17308
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39627 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39627, Naphthalene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17042
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39627, Naphthalene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17061
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39627, Naphthalene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17043
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39627, Naphthalene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17060
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39827 Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39827, Phenanthrene Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17008
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39827, Phenanthrene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17025
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001)

	data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39827, Phenanthrene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17038
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39827, Phenanthrene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17007
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39873 **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39873, Pyrene — Region 3

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17933
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39873, Pyrene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17899
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39873, Pyrene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17932
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 1 monitoring site [313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/31/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39873, Pyrene **Region 3**

San Antonio Creek (San Antonio Watershed, Rancho del las Flores Bridge at Hwy 135 to downstream at Railroad Bridge)

LOE ID:	17914
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Antonio Creek (313) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Antonio Creek (313) was collected at 2 monitoring sites [313SAC-San Antonio Creek at Rail Road Bridge, u/s lagoon , 313SAI-San Antonio Creek at San Antonio Road West]
Temporal Representation:	Data was collected on a single day 3/28/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Alamo Creek**
Water Body ID: **CAR3123008319980825153136**
Water Body Type: **River & Stream**

DECISION ID **32502** **Region 3**
Alamo Creek

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Grazing-Related Sources | Natural Sources
TMDL Name: Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code: 917
Date TMDL Approved by USEPA: 04/24/2013
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Ten of the 27 samples exceed the water quality objective for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of 27 samples exceed the water contact recreation objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on April 24, 2013.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32502, Fecal Coliform **Region 3**
Alamo Creek

LOE ID:	49333
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32502, Fecal Coliform **Region 3**

Alamo Creek

LOE ID:	11724
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 1 of 15 samples

	exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32502, Fecal Coliform **Region 3**

Alamo Creek

LOE ID:	11710
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 8 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32502, Fecal Coliform **Region 3**

Alamo Creek

LOE ID:	49336
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	36329	Region 3
Alamo Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data and two aquatic life beneficial uses. TwoLOEs summarize total ammonia data but using two different pollutant names: Nitrogen, ammonia (Total Ammonia) and Ammonia as Nitrogen. These total ammonia pollutant names are interchangeable and so the sample and exceedance counts for these two names are summed. Zero of 26 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. None of the 28 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This decision replaces the two previously approved decisions for each of the pollutants unionized ammonia (Decision 22636) and total ammonia (Decision 22693) and contains all of the LOEs from those decisions in addition to new LOEs. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 26 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. None of the 28 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36329, Ammonia	**Region 3**
Alamo Creek	

LOE ID:	10039
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road].
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36329, Ammonia **Region 3**

Alamo Creek

LOE ID:	10053
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36329, Ammonia **Region 3**

Alamo Creek

LOE ID:	49276
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36329, Ammonia **Region 3**

Alamo Creek

LOE ID:	49315
Pollutant:	Ammonia as N, Total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36329, Ammonia **Region 3**

Alamo Creek

LOE ID:	49353
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to

	determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36329, Ammonia **Region 3**

Alamo Creek

LOE ID:	10040
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 46597 Region 3

Alamo Creek

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample was below the California Stream Condition Index (CSCI) score of 0.79 which indicates poor water quality for this area. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs).
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 46597, Benthic Community Effects Region 3

Alamo Creek

LOE ID:	78909
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is 0.749847271. This site is below the 0.79 threshold, indicating biological impairment to the aquatic life beneficial use.
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results. CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have impaired aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 312ALAxxx-Alamo Creek at Alamo Creek Road
Temporal Representation:	Surveys done on April 3, 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Maria Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46597, Benthic Community Effects **Region 3**

Alamo Creek

LOE ID:	52989
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI scores is below 39 and is therefore below the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in Alamo Creek resulting in the collection of more than one sample and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score that was collected following the SWAMP Reach Wide Benthos method, or RWB. The IBI score for this sample was 33.
Data Reference:	Santa Maria Rotation 2007 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 312ALAxxx-Alamo Creek at Alamo Creek Road
Temporal Representation:	Surveys done on April 3, 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Maria Rotation).
QAPP Information Reference(s):	

DECISION ID	**36709**	**Region 3**
Alamo Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant; one for total boron and two for dissolved boron. None of the samples exceed the water quality objective for boron. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 28 samples exceeded the objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36709, Boron — Region 3

Alamo Creek

LOE ID:	10054
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36709, Boron — Region 3

Alamo Creek

LOE ID:	10085
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Boron.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 4/13/2000-6/29/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36709, Boron **Region 3**

Alamo Creek

LOE ID:	49242
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36164 — Region 3

Alamo Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 28 samples exceeded the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 28 samples exceeded the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36164, Chloride — Region 3

Alamo Creek

LOE ID:	10055

Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36164, Chloride **Region 3**

Alamo Creek

LOE ID:	49243
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to

	determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41481**	**Region 3**
Alamo Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 25 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 25 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41481, Chlorophyll-a — Region 3

Alamo Creek

LOE ID:	49277
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-10/31/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 41481, Chlorophyll-a **Region 3**

Alamo Creek

LOE ID:	10056
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41481, Chlorophyll-a **Region 3**

Alamo Creek

LOE ID:	49354
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-10/31/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41481, Chlorophyll-a **Region 3**

Alamo Creek

LOE ID:	10069
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**46598**	**Region 3**
Alamo Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Three of the 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 12 samples exceeded the 1986 USEPA Ambient Water Quality Criteria for E. coli in fresh water and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46598, Escherichia coli (E. coli) **Region 3**

Alamo Creek

LOE ID:	49334
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36527 Region 3

Alamo Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objectives or evaluation guidelines. Supporting evidence including dissolved oxygen and chlorophyll a data do not indicate a bio stimulatory problem. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded the objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36527, Nitrate Region 3

Alamo Creek

LOE ID:	49258
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36527, Nitrate **Region 3**

Alamo Creek

LOE ID:	49257
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36527, Nitrate **Region 3**

Alamo Creek

LOE ID:	10071
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36527, Nitrate **Region 3**

Alamo Creek

LOE ID:	49331
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36527, Nitrate **Region 3**

Alamo Creek

LOE ID:	49295
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36527, Nitrate **Region 3**

Alamo Creek

LOE ID:	49294
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36527, Nitrate **Region 3**

Alamo Creek

LOE ID:	49317
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36527, Nitrate **Region 3**

Alamo Creek

LOE ID:	10070
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36527, Nitrate **Region 3**

Alamo Creek

LOE ID:	49071
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36527, Nitrate **Region 3**

Alamo Creek

LOE ID:	49355
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**46599**	**Region 3**
Alamo Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 12 samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of 12 samples exceeded the nitrite objective for livestock watering and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46599, Nitrogen, Nitrite **Region 3**

Alamo Creek

LOE ID:	49259
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	36991	Region 3
Alamo Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Four of 30 samples exceed the Cold Freshwater Habitat objective but none of the 30 samples exceed the objective for Warm Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% and although 9 of 30 samples are below 85% saturation, the median of the data does not exceed (fall below) the Objective. Furthermore, the objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Water Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 30 samples exceed the Cold Freshwater Habitat objective and none of the 30 samples exceed the objective for Warm Freshwater Habitat. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved	**Region 3**
Alamo Creek	

LOE ID:	49297
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	49296
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	49073
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	49072
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	13565
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-

	Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	13564
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	13579
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	13563
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	13546
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	13529
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	13545
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36991, Oxygen, Dissolved **Region 3**

Alamo Creek

LOE ID:	13544
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41485 Region 3
Alamo Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 28 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 28 samples exceed the water quality objective for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41485, Sodium Region 3
Alamo Creek

LOE ID:	10072
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41485, Sodium **Region 3**

Alamo Creek

LOE ID:	49275
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36526**	**Region 3**
Alamo Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence (LOE) is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of 28 samples exceeded the objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36526, Specific Conductivity **Region 3**

Alamo Creek

LOE ID:	11725
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36526, Specific Conductivity **Region 3**

Alamo Creek

LOE ID:	11746
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36526, Specific Conductivity **Region 3**

Alamo Creek

LOE ID:	49256
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to

	determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37234**	**Region 3**
Alamo Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Three lines of evidence are available in the administrative record to assess this pollutant. Note that a recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) categorizes Alamo Creek as having "Unknown population or insufficient data". And since the construction of Twitchell Reservoir there is a permanent barrier to migration. Therefore this temperature guideline, which is specific to steelhead trout is will not be used to determine impairment in this water segment and the use support rating is set to insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of

the Policy.
3. The evaluation guideline is not relevant to the water body.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this temperature guideline is not relevant to this waterbody.

Line of Evidence (LOE) for Decision ID 37234, Temperature, water **Region 3**

Alamo Creek

LOE ID:	13562
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37234, Temperature, water **Region 3**

Alamo Creek

LOE ID:	13583
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37234, Temperature, water **Region 3**

Alamo Creek

LOE ID:	49314
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to

	determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41526**	**Region 3**
Alamo Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the 20 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41526, Turbidity — Region 3

Alamo Creek

LOE ID:	13581
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41526, Turbidity — Region 3

Alamo Creek

LOE ID:	13582
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41526, Turbidity **Region 3**

Alamo Creek

LOE ID:	49075
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).

Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41526, Turbidity **Region 3**

Alamo Creek

LOE ID:	49313
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41526, Turbidity **Region 3**

Alamo Creek

LOE ID:	13548
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 4/13/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41526, Turbidity **Region 3**

Alamo Creek

LOE ID:	13561
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 4/13/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36410**	**Region 3**
Alamo Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Two of the 28 samples exceed the water quality objective for Agricultural Supply, Drinking Water and Recreation and zero of the 28 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 28 samples exceeded the objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	49074
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11763
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	49332
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]

Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	49335
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	49351
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	49298
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]

Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	10970
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11742
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11743
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11744
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11726
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11745

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11727
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 2/1/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	10969
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-

	Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11760
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11761

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	11762
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36410, pH **Region 3**

Alamo Creek

LOE ID:	49274
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42990	Region 3
Alamo Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The pollutant name has been changed to Toxicity. In previous listing cycles, separate fact sheets were developed for Sediment Toxicity and Unknown Toxicity (AKA water toxicity). In this current assessment cycle, those two fact sheets and all of the associated LOEs are combined into this single fact sheet for Toxicity.

Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

For water samples, six of the LOEs summarize a single sample from February 2007 (LOEs 23519, 23520, 23521, 23522, 23530 and 23531). One LOE summarizes a single sample from June 2007 (LOE 52990). The February 2007, sample was tested using three test species (a vertebrate, an invertebrate and an algae). This sample exhibited significant reduction in cell density of the algae relative to the control but, did not exhibit significant increases in mortality of the vertebrate or invertebrate when compared to the relevant laboratory control. In June of 2007 a second sample was collected from Alamo Creek and again tested for toxic effects to three test species (a vertebrate, an invertebrate and an algae). The results for the June 2007 sample are all included in LOE 52990. The June 2007 sample also exhibited significant reduction in cell density of the algae relative to the control but did not have significant toxic effects to the vertebrate or invertebrate test organisms. Therefore both of the samples (February and June of 2007) resulted in significant toxic effects to the algae test organism and therefore exceed the narrative General Objective for toxicity, set to protect for aquatic life beneficial uses.

For the sediment sample, one line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for aquatic life protection meaning the sample did not result in a significant toxic effect to the test organism.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Both water samples exhibited significant reduction in algal cell density relative to the control and this

exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42990, Toxicity **Region 3**

Alamo Creek

LOE ID:	23521
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42990, Toxicity — Region 3

Alamo Creek

LOE ID:	23522
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42990, Toxicity — Region 3

Alamo Creek

LOE ID:	23530
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42990, Toxicity **Region 3**

Alamo Creek

LOE ID:	23520
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 1

samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42990, Toxicity **Region 3**

Alamo Creek

LOE ID:	23531
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42990, Toxicity **Region 3**

Alamo Creek

LOE ID:	23519
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42990, Toxicity **Region 3**

Alamo Creek

LOE ID:	52991
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312ALAxxx.
Temporal Representation:	The sample was collected in April 2008.

Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42990, Toxicity **Region 3**

Alamo Creek

LOE ID:	52990
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity and the one sample exhibited significant toxicity to Selenastrum capricornutum cell count. The toxicity test included survival and biomass of Pimephales promelas and survival and reproduction of Ceriodaphnia dubia and total cell count of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312ALAxxx.
Temporal Representation:	The sample was collected in June 2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **41429** **Region 3**

Alamo Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41429, Chlorpyrifos **Region 3**

Alamo Creek

LOE ID:	16189
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41429, Chlorpyrifos **Region 3**

Alamo Creek

LOE ID:	16188
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**46300**	**Region 3**
Alamo Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46300, Diazinon — Region 3

Alamo Creek

LOE ID:	16840
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46300, Diazinon — Region 3

Alamo Creek

LOE ID:	16853
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Alamo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Alamo Creek was collected at 1 monitoring site [312ALA-Alamo Creek at Alamo Creek Road]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Huasna River**
Water Body ID: **CAR3123008219990304112828**
Water Body Type: **River & Stream**

DECISION ID **40486** **Region 3**
Huasna River

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 12 samples exceed the Basin Plan general water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 12 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40486, Ammonia **Region 3**

Huasna River

LOE ID:	9749
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40486, Ammonia **Region 3**

Huasna River

LOE ID:	9750
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40486, Ammonia **Region 3**

Huasna River

LOE ID:	50308
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40486, Ammonia **Region 3**

Huasna River

LOE ID:	50318
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47581 **Region 3**

Huasna River

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective. However, this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 47581, Benthic Community Effects — Region 3

Huasna River

LOE ID:	54524
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was above 40 and therefore not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are

	converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 312HUAxxx-Huasna River at School Road
Temporal Representation:	Survey done on April 4, 2008.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Maria Rotation).
QAPP Information Reference(s):	

DECISION ID 40202 Region 3

Huasna River

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. Note, the water quality objective is for total boron and the data for dissolved and total boron are both compared to this objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40202, Boron Region 3

Huasna River

LOE ID:	50300
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40202, Boron **Region 3**

Huasna River

LOE ID:	9763
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected on a single day 2/15/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40202, Boron **Region 3**

Huasna River

LOE ID:	9781
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Boron.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-

	Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 4/13/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40024 Region 3

Huasna River

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 40024, Chloride Region 3

Huasna River

LOE ID:	9764
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40024, Chloride **Region 3**

Huasna River

LOE ID:	50301
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chloride.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40034**	**Region 3**
Huasna River		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is

insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 40034, Chlorophyll-a **Region 3**

Huasna River

LOE ID:	50319
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-8/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40034, Chlorophyll-a **Region 3**

Huasna River

LOE ID:	9765

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47322**	**Region 3**
Huasna River		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for E. coli is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Two of the 9 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 9 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47322, Escherichia coli (E. coli) **Region 3**

Huasna River

LOE ID:	50314
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40078** **Region 3**

Huasna River

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Two of 12 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 12 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 12 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 12 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40078, Fecal Coliform **Region 3**

Huasna River

LOE ID:	50316

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40078, Fecal Coliform **Region 3**

Huasna River

LOE ID:	50313
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40078, Fecal Coliform **Region 3**

Huasna River

LOE ID:	11748
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40078, Fecal Coliform **Region 3**

Huasna River

LOE ID:	11747
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40030 Region 3

Huasna River

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 9 nitrate samples exceed the water quality objective for Warm Freshwater Habitat beneficial use. Zero of the 9 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 9 nitrate/nitrite samples exceed the water quality objective for Warm Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 9 nitrate samples exceed the water quality objective for Warm Freshwater Habitat beneficial use. Zero of the 9 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 9 nitrate/nitrite samples exceed the water quality objective for Warm Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40030, Nitrate — Region 3

Huasna River

LOE ID:	9779
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40030, Nitrate **Region 3**

Huasna River

LOE ID:	9766
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40030, Nitrate **Region 3**

Huasna River

LOE ID:	50304
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40030, Nitrate — Region 3

Huasna River

LOE ID:	50321
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40030, Nitrate — Region 3

Huasna River

LOE ID:	50311
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40030, Nitrate **Region 3**

Huasna River

LOE ID:	50320
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40030, Nitrate **Region 3**

Huasna River

LOE ID:	50310
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40030, Nitrate **Region 3**

Huasna River

LOE ID:	50303
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47582** **Region 3**

Huasna River

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47582, Nitrogen, Nitrite **Region 3**

Huasna River

LOE ID:	50305
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42635	Region 3
Huasna River		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded and the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

Line of Evidence (LOE) for Decision ID 42635, Oxygen, Dissolved — Region 3

Huasna River

LOE ID:	50323
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42635, Oxygen, Dissolved — Region 3

Huasna River

LOE ID:	50322
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42635, Oxygen, Dissolved **Region 3**

Huasna River

LOE ID:	13587
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42635, Oxygen, Dissolved **Region 3**

Huasna River

LOE ID:	13603
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40044** **Region 3**

Huasna River

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 40044, Sodium **Region 3**

Huasna River

LOE ID:	9780
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40044, Sodium **Region 3**

Huasna River

LOE ID:	50307
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Sodium.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40229	Region 3
Huasna River		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 40229, Specific Conductivity	**Region 3**
Huasna River	

LOE ID:	50302
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40229, Specific Conductivity **Region 3**

Huasna River

LOE ID:	11749
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40031**	**Region 3**
Huasna River		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 9 samples exceed the evaluation guideline (Shoup and Wahl 2009) used to interpret the Warm Freshwater Habitat water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 40031, Turbidity **Region 3**

Huasna River

LOE ID:	13605
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected on a single day 4/13/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40031, Turbidity **Region 3**

Huasna River

LOE ID:	50325
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-8/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40916**	**Region 3**
Huasna River		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 12 samples exceed the water quality objectives for Agriculture, Drinking Water, Recreation, and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards

are being met.

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	50306
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	50315
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	50317
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	50312
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	50324
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Huasna River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 1/29/2007-1/14/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	11768
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	11767
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	11766
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	11765
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for

	Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40916, pH **Region 3**

Huasna River

LOE ID:	11750
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Huasna River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Huasna River was collected at 1 monitoring site [312HUA-Husana River at Husana Townsite Road]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/3/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Bradley Channel**
Water Body ID: **CAR3121003020021002233532**
Water Body Type: **River & Stream**

DECISION ID **37934** **Region 3**
Bradley Channel

Pollutant: **pH**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Fifty of the 84 samples exceed the water quality objectives for drinking water and recreation and 34 of the 84 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty of the 84 samples exceed the water quality objectives for drinking water and recreation and 34 of the 84 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**
Bradley Channel

LOE ID: 14438

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 12 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	14436
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 16 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	49465
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	48131
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 23 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11877
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for

	Bradley Channel to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	48130
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 23 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11879
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11878
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	48129
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 16 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	14422
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 12 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	14423
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 16 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	48141
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 16 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	49506
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]

Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	49504
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11876
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11875
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11581
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11580
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11579
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11578
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	11577
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	49501

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	48132
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 23 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	14437
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 16 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37934, pH **Region 3**

Bradley Channel

LOE ID:	49475
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37664** **Region 3**

Bradley Channel

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11255) and total ammonia (Decision 11256). This decision

contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which 28 of the 71 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Four LOE summarizes total ammonia data and 1 of the 88 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-eight of the 71 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and these exceed the allowable frequency listed in Table [NUMBER] of the Listing Policy.
4. The Total Maximum Daily Loads for Nitrogen Compounds and Orthophosphate for the Lower Santa Maria River Watershed and Tributaries to Oso Flaco Lake has been approved by the Central Coast Water Board in 2013 and approved by USEPA on March 8, 2016.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

This water body pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	49487
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	14337
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	14402
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 11 of 21 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	9884
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive].
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	49450
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	9882
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]

Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	48079
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 14 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 4/10/2007-3/30/2010.
Environmental Conditions:	Two samples result were reported as non-detect and the detection limit was above the guideline. Because these results are considered estimated, these samples were not used in analysis. The samples are from 6/26/07 and 7/28/09.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	49460
Pollutant:	Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	48078
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 14 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 4/10/2007-3/30/2010.
Environmental Conditions:	Two samples result were reported as non-detect and the detection limit was above the guideline. Because these results are considered estimated, these samples were not used in analysis. The samples are from 6/26/07 and 7/28/09.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	48077
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 42 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	14388
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 11 of 21 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37664, Ammonia **Region 3**

Bradley Channel

LOE ID:	9883
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive].
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42868**	**Region 3**
Bradley Channel		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Nine of nine samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to

significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Zero of nine samples did not exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). For the municipal and domestic supply beneficial use and sediment samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Nine of nine samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	15220
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	15221
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	16203
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	16204
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	48083
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	48082
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	53635
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	53636
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	53631

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	53632
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	53633
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos. Three additional samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L

	(Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos **Region 3**

Bradley Channel

LOE ID:	53634
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos. Three additional samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos — Region 3

Bradley Channel

LOE ID:	53637
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel. One sample was collected but is not included in this assessment because the result was "detected but not quantified" meaning that the parameter is measured but below the reporting limit and the laboratory reporting limit was above the guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy to be assessed as an exceedance of the criteria. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42868, Chlorpyrifos — Region 3

Bradley Channel

LOE ID:	53638
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel. One sample was collected but is not included in this assessment because the result was "detected but not quantified" meaning that the parameter is measured but below the reporting limit and the laboratory reporting limit was above the guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy to be assessed as an exceedance of the criteria. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**32386**	**Region 3**
Bradley Channel		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. However, LOE #11859 replaces and corrects LOE #1978. LOE #1978 incorrectly included two samples that were exactly of the value of the criterion (400 MPN/100 mL). The objective requires that samples exceed 400 MPN/100 mL. Eleven of 25 samples exceed the water quality objective for Water Contact Recreation (i.e. swimming). Only 1 of the 25 samples exceeded the objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 14 samples exceed the water quality objective for Water Contact Recreation and this exceeds the allowable frequency calculated from the equation in Table 4.2 of the Listing Policy. 4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by the USEPA on April 24, 2013. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. However, there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32386, Fecal Coliform **Region 3**

Bradley Channel

LOE ID:	49505
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32386, Fecal Coliform **Region 3**

Bradley Channel

LOE ID:	49502
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32386, Fecal Coliform **Region 3**

Bradley Channel

LOE ID:	11859
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 7 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32386, Fecal Coliform **Region 3**

Bradley Channel

LOE ID:	1978
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Nine of 14 samples exceeded water quality objective (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from one site.
Temporal Representation:	Monthly sampling events from January 2000 - February 2001.
Environmental Conditions:	Samples taken from 1/00 to 2/01; 14 sampling dates.
QAPP Information:	CCAMP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32386, Fecal Coliform **Region 3**

Bradley Channel

LOE ID:	11860
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**33689**	**Region 3**
Bradley Channel		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Nineteen lines of evidence are available in the administrative record to assess this pollutant. Twenty-one of the 43 nitrate samples and 50 of the 66 nitrate/nitrite samples exceed the water quality objectives for the Drinking Water beneficial use. Forty-one of the 43 nitrate samples and 49 of the 50 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 0.8 mg/L to 22.2 mg/L, exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. In addition, this waterbody frequently exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Floating algal mats ranged from 0 to 100% cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration ranged from 0 ug/L to 170 ug/L, frequently exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 3.74 to 4.69 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging from 86 g/m2 to 102 g/m2 ash-free dry mass (AFDM). These exceed the screening threshold for algae biomass of 60 grams/m2 (Creager, et al., 2006).
6) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 QUAL2K model (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging from 214 mg/m2 to 255 mg/m2. These exceed the Cold water screening threshold of 150 mg/m2 and the Warm water screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-one of the 43 nitrate samples and 50 of the 66 nitrate/nitrite samples exceed the water quality objectives for the Drinking Water beneficial use. Forty-one of the 43 nitrate samples and 49 of the 50 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment..
4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on March 8, 2016.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	48099
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	48113
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 29 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	14336

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	48097
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	49453
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	48098
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	48114
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	48112
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	27860
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	27863
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	27862
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	27861
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	15216
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 13 of 16 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 3/22/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33689, Nitrate — Region 3

Bradley Channel

LOE ID:	49462
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33689, Nitrate — Region 3

Bradley Channel

LOE ID:	49472
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	9592
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	49489
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [

	312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	49490
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 8 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33689, Nitrate **Region 3**

Bradley Channel

LOE ID:	49452
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42937**	**Region 3**
Bradley Channel		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for removal on the CWA section 303(d) List under section 4.1 of the

Conclusion:

Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Twenty-five lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Ten LOEs summarizes sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and five additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess toxic effects in sediment samples. Seven of the seven sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Fifteen LOEs summarize water samples. Eight water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eighteen additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-six total samples are available to assess toxic effects in water samples. Twenty-three of the twenty-six water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.
In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-three of 26 water samples and seven of seven sediment samples exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23723
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 3/22/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23695
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver

	Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 3/22/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23726
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control

	based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23711
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected on a single day 4/20/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23710
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected on a single day 4/20/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23709
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23708
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23729
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23689
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23688
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23728
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23687
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support

	and results are as follows: 7 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 3/22/2005-9/27/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23686
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are

	met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street].
Temporal Representation:	Data was collected over the time period 3/22/2005-9/27/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23725
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23727
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	23724
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	53656
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to both growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312BCUxxx.
Temporal Representation:	The sample was collected in April 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	53657
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Bradley Channel site 312BCJ.
Temporal Representation:	The samples were collected quarterly from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	53743
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. Five of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in five samples 10/21/2008, 3/3/2009, 3/31/2009, 6/10/2009, 8/26/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Bradley Channel at River Oaks (312BRO).
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	53744
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Ten of the 11 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth, Selenastrum capricornutum growth and Hyalella azteca growth. The eleven samples exhibited significant toxicity to Ceriodaphnia dubia reproduction and survival(1/23/08-1/20/10), Pimephales promelas survival and growth (10/23/07-1/20/10), and Selanastrum capricornutum growth (3/30/10).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. A statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064

Spatial Representation:	The samples were collected at Bradley Channel site 312BCJ.
Temporal Representation:	The samples were collected quarterly from February 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	53745
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on the survival of Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Bradley Channel at River Oaks (312BRO).
Temporal Representation:	The samples were collected in and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	53746
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Ceriodaphnia dubia. The toxicity test included survival and reproduction of Ceriodaphnia dubia, survival and biomass of Pimephales promelas, and total cell count of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 312BCUxxx.
Temporal Representation:	The samples were collected in June 2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	78944
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to both growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312BCUxxx.
Temporal Representation:	The sample was collected in April 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	78943
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on the survival of Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Bradley Channel at River Oaks (312BRO).
Temporal Representation:	The samples were collected in and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field

	crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42937, Toxicity **Region 3**

Bradley Channel

LOE ID:	78945
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Bradley Channel site 312BCJ.
Temporal Representation:	The samples were collected quarterly from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **47013** **Region 3**

Bradley Channel

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (National Recommended Water Quality Criteria,

2009) used to interpret the narrative water quality objective for aquatic life. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.
This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single water sample did not exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009) used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47013, Azinphos-methyl (Guthion) **Region 3**

Bradley Channel

LOE ID:	53624
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]

Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47013, Azinphos-methyl (Guthion) **Region 3**

Bradley Channel

LOE ID:	53623
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **47006** **Region 3**

Bradley Channel

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut, T.L. et al., 2012) used to interpret the narrative water quality objective for aquatic life. The single sediment sample did exceed the evaluation guideline (Amweg and Weston, 2007) used to protect aquatic life and that sample (also tested for toxicity to invertebrates) resulted in significant toxic effects. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guideline but the single sediment sample did exceeded the evaluation guideline and resulted in a toxic effect to test organisms. However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47006, Bifenthrin **Region 3**

Bradley Channel

LOE ID:	53626
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47006, Bifenthrin **Region 3**

Bradley Channel

LOE ID:	53625
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47006, Bifenthrin **Region 3**

Bradley Channel

LOE ID:	53628
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47006, Bifenthrin **Region 3**

Bradley Channel

LOE ID:	53627
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47006, Bifenthrin **Region 3**

Bradley Channel

LOE ID:	53745
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on the survival of Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if

	there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Bradley Channel at River Oaks (312BRO).
Temporal Representation:	The samples were collected in and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47001 Region 3

Bradley Channel

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Sediment Â– Single sample This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47001, Chlordane Region 3

Bradley Channel

LOE ID:	53630
Pollutant:	Chlordane

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47001, Chlordane **Region 3**

Bradley Channel

LOE ID:	53629
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 42837 Region 3

Bradley Channel

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One of the 81 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 81 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42837, Chlorophyll-a Region 3

Bradley Channel

LOE ID:	48080
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42837, Chlorophyll-a **Region 3**

Bradley Channel

LOE ID:	9897
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42837, Chlorophyll-a **Region 3**

Bradley Channel

LOE ID:	14404
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42837, Chlorophyll-a **Region 3**

Bradley Channel

LOE ID:	14403
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support

	and results are as follows: 0 of 20 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42837, Chlorophyll-a **Region 3**

Bradley Channel

LOE ID:	9898
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42837, Chlorophyll-a **Region 3**

Bradley Channel

LOE ID:	49461
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-11/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42837, Chlorophyll-a **Region 3**

Bradley Channel

LOE ID:	49451
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-11/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42837, Chlorophyll-a **Region 3**

Bradley Channel

LOE ID:	48081
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]

Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **47007** **Region 3**

Bradley Channel

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample result was not used in the assessment because the result was a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified. The single sediment sample did not exceed the evaluation guideline (Amweg, 2005) used to protect aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47007, Cyfluthrin **Region 3**

Bradley Channel

LOE ID:	53642

Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47007, Cyfluthrin **Region 3**

Bradley Channel

LOE ID:	53641
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin.

	The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47007, Cyfluthrin **Region 3**

Bradley Channel

LOE ID:	53639
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47007, Cyfluthrin **Region 3**

Bradley Channel

LOE ID:	53640
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47008	Region 3
Bradley Channel		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut, T.L. et al., 2012) used to interpret the narrative water quality objective for aquatic life. The single sediment sample did exceed the evaluation guideline (Amweg, 2005) used to protect aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guideline and the single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47008, Cyhalothrin, Lambda	**Region 3**
Bradley Channel	

LOE ID:	53646
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin,

	lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47008, Cyhalothrin, Lambda **Region 3**

Bradley Channel

LOE ID:	53643
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from

Guideline Reference:	Amweg et al. (2005). Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47008, Cyhalothrin, Lambda **Region 3**

Bradley Channel

LOE ID:	53645
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47008, Cyhalothrin, Lambda **Region 3**

Bradley Channel

LOE ID:	53644
Pollutant:	Cyhalothrin, Lambda

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**47009**	**Region 3**
Bradley Channel		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. The single water sample did exceed the evaluation guideline (Fojut, T.L. et al., 2012) used to interpret the narrative water quality objective for aquatic life. The single sediment sample did exceed the evaluation guideline (Amweg, 2005) used to protect aquatic life and that sample (also tested for toxicity to

invertebrates) resulted in significant toxic effects.
Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single water sample did exceed the evaluation guideline (Fojut, T.L. et al., 2012) used to interpret the narrative water quality objective for aquatic life. The single sediment sample did exceed the evaluation guideline (Amweg, 2005) used to protect aquatic life and that sample (also tested for toxicity to invertebrates) resulted in significant toxic effects. However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47009, Cypermethrin **Region 3**

Bradley Channel

LOE ID:	53650
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47009, Cypermethrin **Region 3**

Bradley Channel

LOE ID:	53649
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47009, Cypermethrin **Region 3**

Bradley Channel

LOE ID:	53648
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47009, Cypermethrin **Region 3**

Bradley Channel

LOE ID:	53647
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47009, Cypermethrin **Region 3**

Bradley Channel

LOE ID:	53745
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on the survival of Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Bradley Channel at River Oaks (312BRO).
Temporal Representation:	The samples were collected in and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling

	and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46998 Region 3

Bradley Channel

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46998, DDD (Dichlorodiphenyldichloroethane) Region 3

Bradley Channel

LOE ID:	53652
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46998, DDD (Dichlorodiphenyldichloroethane) Region 3

Bradley Channel

LOE ID:	53651
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46999 Region 3

Bradley Channel

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Bradley Channel

LOE ID:	53654
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Bradley Channel

LOE ID:	53653
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**47000**	**Region 3**
Bradley Channel		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Sediment Â– Single sample This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Bradley Channel

LOE ID:	53736
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Bradley Channel

LOE ID:	53598
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Bradley Channel

LOE ID:	53737
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Bradley Channel

LOE ID:	53655
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47010 Region 3

Bradley Channel

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (maximum acceptable toxicant concentration, USEPA, 1985) used to interpret the narrative water quality objective for aquatic life. The single sediment sample did exceed the evaluation guideline (Amweg, 2005) used to protect aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single water sample did not exceed the evaluation guideline and the single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47010, Deltamethrin **Region 3**

Bradley Channel

LOE ID:	53601
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47010, Deltamethrin **Region 3**

Bradley Channel

LOE ID:	53599
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79

	ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47010, Deltamethrin **Region 3**

Bradley Channel

LOE ID:	53600
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47010, Deltamethrin **Region 3**

Bradley Channel

LOE ID:	53602
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **47014** **Region 3**

Bradley Channel

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 water samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009) used to interpret the narrative water quality objective for aquatic life. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.
This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 6 water samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009) used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47014, Demeton **Region 3**

Bradley Channel

LOE ID:	53604
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [

	Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47014, Demeton **Region 3**

Bradley Channel

LOE ID:	53605
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47014, Demeton **Region 3**

Bradley Channel

LOE ID:	53606
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 2 monitoring sites [Bradley Channel at Culvert - 312BCC, Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47014, Demeton **Region 3**

Bradley Channel

LOE ID:	53608
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47014, Demeton **Region 3**

Bradley Channel

LOE ID:	53607
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47014, Demeton **Region 3**

Bradley Channel

LOE ID:	53603
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **47015** **Region 3**

Bradley Channel

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 water samples exceed the evaluation guideline (maximum acceptable toxicant concentration, USEPA 1985) used to interpret the narrative water quality objective for aquatic life. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set

to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.
This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 6 water samples exceed the evaluation guideline (maximum acceptable toxicant concentration, USEPA 1985) used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47015, Dichlorvos **Region 3**

Bradley Channel

LOE ID:	53687
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47015, Dichlorvos **Region 3**

Bradley Channel

LOE ID:	53688
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47015, Dichlorvos **Region 3**

Bradley Channel

LOE ID:	53695
Pollutant:	Dichlorvos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47015, Dichlorvos **Region 3**

Bradley Channel

LOE ID:	53618
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47015, Dichlorvos **Region 3**

Bradley Channel

LOE ID:	53690
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985,

	P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47015, Dichlorvos **Region 3**

Bradley Channel

LOE ID:	53694
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of

	Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47015, Dichlorvos **Region 3**

Bradley Channel

LOE ID:	53689
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 2 monitoring sites [Bradley Channel at Culvert - 312BCC, Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	47002	Region 3
Bradley Channel		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Sediment Â– Single sample This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47002, Dieldrin	**Region 3**
Bradley Channel	

LOE ID:	53696
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47002, Dieldrin **Region 3**

Bradley Channel

LOE ID:	53697
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47016 Region 3

Bradley Channel

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 water samples exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database) used to interpret the narrative water quality objective for aquatic life but 1 of the 6 water samples exceed the evaluation guideline set to protect drinking water (California Department of Health Services notification level). A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 6 water samples exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database) used to interpret the narrative water quality objective for aquatic life but 1 of the 6 water samples exceed the evaluation guideline set to protect drinking water (California Department of Health Services notification level). However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47016, Dimethoate Region 3

Bradley Channel

LOE ID:	53704
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47016, Dimethoate **Region 3**

Bradley Channel

LOE ID:	53705
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47016, Dimethoate **Region 3**

Bradley Channel

LOE ID:	53707
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47016, Dimethoate **Region 3**

Bradley Channel

LOE ID:	53708
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47016, Dimethoate **Region 3**

Bradley Channel

LOE ID:	53709
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47016, Dimethoate **Region 3**

Bradley Channel

LOE ID:	53710
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).

Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47016, Dimethoate **Region 3**

Bradley Channel

LOE ID:	53715
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47016, Dimethoate **Region 3**

Bradley Channel

LOE ID:	53702
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47016, Dimethoate **Region 3**

Bradley Channel

LOE ID:	53703
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47017 Region 3

Bradley Channel

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 water samples exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database) used to interpret the narrative water quality objective for aquatic life but 1 of the 6 water samples exceed the evaluation guideline set to protect drinking water (California Department of Health Services notification level). A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 6 water samples exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database) used to interpret the narrative water quality objective for aquatic life but 1 of the 6 water samples exceed the evaluation guideline set to protect drinking water (California Department of Health Services notification level). However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47017, Disulfoton Region 3

Bradley Channel

LOE ID:	53723
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47017, Disulfoton **Region 3**

Bradley Channel

LOE ID:	53717
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47017, Disulfoton **Region 3**

Bradley Channel

LOE ID:	53718
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

DECISION ID	47003	Region 3
Bradley Channel		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Sediment Â– Single sample This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47003, Endrin	**Region 3**
Bradley Channel	

LOE ID:	53725
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47003, Endrin **Region 3**

Bradley Channel

LOE ID:	53724
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

	for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47316 Region 3

Bradley Channel

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 water samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011). The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 water samples and zero of the 1 sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47316, Esfenvalerate/Fenvalerate Region 3

Bradley Channel

LOE ID:	53732
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47316, Esfenvalerate/Fenvalerate **Region 3**

Bradley Channel

LOE ID:	53733
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47316, Esfenvalerate/Fenvalerate **Region 3**

Bradley Channel

LOE ID:	53731
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [

	Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47316, Esfenvalerate/Fenvalerate **Region 3**

Bradley Channel

LOE ID:	53734
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47316, Esfenvalerate/Fenvalerate **Region 3**

Bradley Channel

LOE ID:	53726
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47316, Esfenvalerate/Fenvalerate **Region 3**

Bradley Channel

LOE ID:	53739
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47018 Region 3

Bradley Channel

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 water samples exceed the evaluation guideline (maximum acceptable toxicant concentration, USEPA, 1985) used to interpret the narrative water quality objective for aquatic life. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 6 water samples exceed the evaluation guideline (maximum acceptable toxicant concentration, USEPA, 1985) used to interpret the narrative water quality objective for aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47018, Ethoprop Region 3

Bradley Channel

LOE ID:	53658
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47018, Ethoprop **Region 3**

Bradley Channel

LOE ID:	53659
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47018, Ethoprop **Region 3**

Bradley Channel

LOE ID:	53660
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47018, Ethoprop **Region 3**

Bradley Channel

LOE ID:	53740
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley

	Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47018, Ethoprop **Region 3**

Bradley Channel

LOE ID:	53741
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 2 monitoring sites [Bradley Channel at Culvert - 312BCC, Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47018, Ethoprop **Region 3**

Bradley Channel

LOE ID:	53742
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**47004**	**Region 3**
Bradley Channel		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Sediment Â– Single sample This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status

and the pollutant concentration in sediment must be associated with a toxicity to result.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47004, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Bradley Channel

LOE ID:	53662
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

	for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47004, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Bradley Channel

LOE ID:	53661
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **47318** **Region 3**

Bradley Channel

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guidelines for aquatic life uses (CDFW, 1992) or drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines for aquatic life uses (CDFW, 1992) or drinking water (USEPA drinking water health advisory level). None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47318, Methidathion **Region 3**

Bradley Channel

LOE ID:	53673
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47318, Methidathion **Region 3**

Bradley Channel

LOE ID:	53674
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC)

	of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47318, Methidathion **Region 3**

Bradley Channel

LOE ID:	53672
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **47317** **Region 3**

Bradley Channel

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 water samples exceed the evaluation guidelines for aquatic life uses (CDFW, 1992) and drinking water (USEPA drinking water health advisory level). The single sediment sample did not exceed the evaluation guideline (Ding et al., 2011).

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 6 water samples exceed the evaluation guidelines for aquatic life uses (CDFW, 1992) and drinking water (USEPA drinking water health advisory level). The single sediment sample did not exceed the evaluation guideline (Ding et al., 2011). None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53678
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53679
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from

	drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53685
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53676
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53680
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53681
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the

	Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53682
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53683
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53684
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53675
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The

	LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47317, Methyl Parathion **Region 3**

Bradley Channel

LOE ID:	53686
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **37311** **Region 3**

Bradley Channel

Pollutant: **Oxygen, Dissolved**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Three water quality objectives are assessed. Seven of the 84 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 5 of the 84 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three water quality objectives are assessed. Seven of the 84 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 5 of the 84 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	13439
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	48127
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved — Region 3

Bradley Channel

LOE ID:	48128
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved — Region 3

Bradley Channel

LOE ID:	13403
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for

	Bradley Channel to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	48115
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]

Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	48116
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	13437
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	49474
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	13440
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	49473
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	13438
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	14419
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]

Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	14420
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	14421
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	14405
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	49464
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [

	312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	13419
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	13402
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	49463
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 11 samples exceed the

	criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37311, Oxygen, Dissolved **Region 3**

Bradley Channel

LOE ID:	13404
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47012 Region 3

Bradley Channel

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47012, PCBs (Polychlorinated biphenyls) Region 3

Bradley Channel

LOE ID:	53693
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47012, PCBs (Polychlorinated biphenyls) Region 3

Bradley Channel

LOE ID:	53698
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47021 Region 3

Bradley Channel

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (USEPA National Recommended Water Quality Criteria, 2006) used to interpret the narrative water quality objective for aquatic life. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47021, Parathion Region 3

Bradley Channel

LOE ID:	53692
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47021, Parathion **Region 3**

Bradley Channel

LOE ID:	53691
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47011	Region 3
Bradley Channel		

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. The single water sample result was not used in the assessment because the result was a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified. The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47011, Permethrin, total — Region 3

Bradley Channel

LOE ID:	53706
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Permethrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47011, Permethrin, total — Region 3

Bradley Channel

LOE ID:	53700
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47011, Permethrin, total **Region 3**

Bradley Channel

LOE ID:	53701
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47011, Permethrin, total **Region 3**

Bradley Channel

LOE ID:	53699
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA.

	Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47020 Region 3

Bradley Channel

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 water samples exceed the evaluation guideline (USEPA Office of Pesticide Programs, 2011) used to interpret the narrative water quality objective for aquatic life. Zero of the 6 water samples exceed the evaluation guideline set to protect drinking water (National Academy of Sciences health advisory level, 1977). A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 6 water samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47020, Phorate Region 3

Bradley Channel

LOE ID:	53714
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of three samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47020, Phorate **Region 3**

Bradley Channel

LOE ID:	53711
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA

	Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47020, Phorate **Region 3**

Bradley Channel

LOE ID:	53712
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47020, Phorate **Region 3**

Bradley Channel

LOE ID:	53713
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47020, Phorate **Region 3**

Bradley Channel

LOE ID:	53727
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial

	use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47020, Phorate **Region 3**

Bradley Channel

LOE ID:	53722
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.

Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47020, Phorate **Region 3**

Bradley Channel

LOE ID:	53721
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47020, Phorate **Region 3**

Bradley Channel

LOE ID:	53720
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47020, Phorate **Region 3**

Bradley Channel

LOE ID:	53719
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47022 Region 3

Bradley Channel

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database) used to interpret the narrative water quality objective for aquatic life. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47022, Phosmet Region 3

Bradley Channel

LOE ID:	53729
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47022, Phosmet **Region 3**

Bradley Channel

LOE ID:	53730
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47022, Phosmet **Region 3**

Bradley Channel

LOE ID:	53728
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	38084	Region 3
Bradley Channel		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. However the evaluation guideline (Moyle, 1976) is specific to steelhead trout tolerance and does it flow to or connect with steelhead habitat. Therefore the evaluation guideline (which is specific for steelhead) is not applicable in this water segment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Therefore the evaluation guideline (which is specific for steelhead) is not applicable in this water segment. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the evaluation guideline is not applicable.

Line of Evidence (LOE) for Decision ID 38084, Temperature, water	**Region 3**
Bradley Channel	

LOE ID:	13458
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38084, Temperature, water **Region 3**

Bradley Channel

LOE ID:	49486
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38084, Temperature, water **Region 3**

Bradley Channel

LOE ID:	14453
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 12 of 20 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38084, Temperature, water **Region 3**

Bradley Channel

LOE ID:	13420

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/11/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38084, Temperature, water **Region 3**

Bradley Channel

LOE ID:	48144
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 16 of 39 samples exceed the

	criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42830**	**Region 3**
Bradley Channel		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Fifty-two of the 79 samples exceed the evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity in Warm Freshwater Habitats. Bradley Channel and the downstream ponds are habitat to bass and other predatory fish who rely on their vision for hunting. However, Bradley Channel is not connected to steelhead trout habitat and therefore the evaluation guideline for Cold Freshwater Habitat evaluation guideline (Sigler et al. 1984), which is specific to steelhead, is not relevant for this water segment. Therefore the beneficial use rating for this pollutant and the Cold Freshwater Habitat use is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-two of the 79 samples exceed the evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity in Warm Freshwater Habitats and this exceeds the

allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	48143
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 26 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	13421
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 4/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	49466
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	14452
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 18 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	13457
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	49476
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	48142
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 36 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	13422
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Channel to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 4/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	14439
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 18 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42830, Turbidity **Region 3**

Bradley Channel

LOE ID:	13441
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/8/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42869**	**Region 3**
Bradley Channel		

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. Four of 12 water samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of 9 water samples exceed the USEPA drinking water health advisory. Zero out of 2 sediment samples exceed the Evaluation Guideline (Ding et al., 2011) applied to protect for aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four of 12 water samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Santa Maria Watershed toxicity and pesticides TMDL has been approved by USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this water body-pollutant combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	16856
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	48085
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	15222
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	15234
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones Street]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	16857
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	48084
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCJ - Bradley Channel at Jones St.]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	53614
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	53615
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	53616
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial

	use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	53609
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	53617
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	53610
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	53613
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An

	arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42869, Diazinon **Region 3**

Bradley Channel

LOE ID:	53612
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [

	Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47315 — Region 3

Bradley Channel

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Collection System Failure | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Five of the 11 samples exceed evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 11 samples exceed evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47315, Escherichia coli (E. coli) — Region 3

Bradley Channel

LOE ID:	49503
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	5

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Channel to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [312BCU-Bradley Channel u/s of ponds at Magellan Drive]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47019**	**Region 3**
Bradley Channel		

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Three of the 6 samples exceed the evaluation guideline (Palumbo, A.J. et al., 2012) used to interpret the narrative water quality objective for aquatic life. Zero of the 6 samples exceed the USEPA drinking water health advisory level. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' for the municipal supply beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 6 samples exceed the evaluation guideline (Palumbo, A.J. et al., 2012) used to interpret the narrative water quality objective for aquatic life and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 47019, Malathion **Region 3**

Bradley Channel

LOE ID:	53663
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: None of the three samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47019, Malathion **Region 3**

Bradley Channel

LOE ID:	53664
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47019, Malathion — Region 3

Bradley Channel

LOE ID:	53665
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47019, Malathion **Region 3**

Bradley Channel

LOE ID:	53666
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: One of three samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47019, Malathion **Region 3**

Bradley Channel

LOE ID:	53667
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: One of three samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at Jones - 312BCJ]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data, following the QAPP for that program and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47019, Malathion **Region 3**

Bradley Channel

LOE ID:	53668
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47019, Malathion **Region 3**

Bradley Channel

LOE ID:	53669
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel - 312BCJ]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47019, Malathion **Region 3**

Bradley Channel

LOE ID:	53670
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47019, Malathion **Region 3**

Bradley Channel

LOE ID:	53671
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Bradley Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bradley Channel was collected at 1 monitoring site [Bradley Channel at River Oaks - 312BRO]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Main Street Channel**
Water Body ID: **CAR3121003020020819110803**
Water Body Type: **River & Stream**

DECISION ID **42193** **Region 3**
Main Street Channel

Pollutant: **pH**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Five of the 97 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 13 of the 97 samples exceed the water quality objectives for Drinking Water and Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 97 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 13 of the 97 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**
Main Street Channel

LOE ID: 48354

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	10709
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	48356
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 4 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	48357

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	48
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 4 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	48358
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	48355
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	48
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 4 of 48 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	10695
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	10694
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	10693
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	10692
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	11788
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	14485
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	14486
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	14309
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	14310
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	14471
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	10691
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	10971
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	11786
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	11787
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	50824
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 4 of 23 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	50827
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 4 of 23 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	50844
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	23
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 4 of 23 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	50867
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 3 of 23 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42193, pH **Region 3**

Main Street Channel

LOE ID:	50788
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 3 of 23 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42434** **Region 3**

Main Street Channel

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Sixty-one of the 94 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 51 of the 94 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Sixty-one of the 94 samples exceed the evaluation guideline for Cold Freshwater Habitat and 51 of the 94 samples exceed the Warm Freshwater Habitat evaluation guideline and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	50868
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 11 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal

	at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	50789
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 12 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	13626

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 4/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	48371
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 23 of 51 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	14487
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	14488
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	13352
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	48370
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to

	determine beneficial use support and results are as follows: 32 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	13625
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon.

	Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 4/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42434, Turbidity **Region 3**

Main Street Channel

LOE ID:	13353
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 33068 **Region 3**

Main Street Channel

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which 55 of the 80 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Five LOEs summarize total ammonia data and seven of the 106 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-five of the 80 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed was approved by USEPA on March 8, 2016.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	50804
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 4 of 23 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	50845
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 15 of 21 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	50769
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 15 of 21 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/27/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	15025
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Santa Maria Stormwater Monitoring (R3_SM_Storm) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [S-MainSt Channel]
Temporal Representation:	Data was collected over the time period 12/2/2005-3/17/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	14290
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	9857
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section

	II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	9782
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	48367
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 54 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	15232
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	9843
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing].
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	48369
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 23 of 36 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 4/10/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	48368
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 23 of 36 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 4/10/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33068, Ammonia **Region 3**

Main Street Channel

LOE ID:	14277
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42138**	**Region 3**
Main Street Channel		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Six of the seven samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial

uses. Zero of nine samples did not exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). There were seven samples that were not included in this decision because the laboratory data reporting limit(s) were above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. For the municipal and domestic supply beneficial use and the sediment samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Six of the seven samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	48383
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	48384
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).

Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	15990
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	15991
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	15252

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	15251
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	54908
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	54907
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl

butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	54809
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal. One sample was collected but is not included in this assessment because the result was "detected but not quantified" meaning that the parameter is measured but below the reporting limit and the laboratory reporting limit was above the guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy to be assessed as an exceedance of the criteria. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	54802
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	54801
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	54808
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal. One sample was collected but is not included in this assessment because the result was "detected but not quantified" meaning that the parameter is measured but below the reporting limit and the laboratory reporting limit was above the guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy to be assessed as an exceedance of the criteria. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	54799
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: None of the samples exceed the criterion for Chlorpyrifos. Six samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42138, Chlorpyrifos **Region 3**

Main Street Channel

LOE ID:	54800
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: None of the samples exceed the criterion for Chlorpyrifos. Six samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **42139** **Region 3**

Main Street Channel

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Two of the thirteen samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses. Zero of nine samples exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). The single sediment sample (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. For the municipal beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the thirteen samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by the USEPA on August 31, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	54859
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	54858
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	54850
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	54851
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	54857
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	54856
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]

Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	54855
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	54854
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	15253
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	15266
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	16628
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]

Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	48394
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	16642
Pollutant:	Diazinon

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42139, Diazinon **Region 3**

Main Street Channel

LOE ID:	48393
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **42090** **Region 3**

Main Street Channel

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Thirty of 39 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 6 of 39 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty of 39 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The [TMDL NAME] has been approved by USEPA on [MM/DD/YEAR]. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42090, Fecal Coliform **Region 3**

Main Street Channel

LOE ID:	15023
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Santa Maria Stormwater Monitoring (R3_SM_Storm) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [S-MainSt Channel]
Temporal Representation:	Data was collected over the time period 12/2/2005-3/17/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42090, Fecal Coliform **Region 3**

Main Street Channel

LOE ID:	11769
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 8 of 13 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42090, Fecal Coliform **Region 3**

Main Street Channel

LOE ID:	11785
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for

	Main Street Canal to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42090, Fecal Coliform **Region 3**

Main Street Channel

LOE ID:	15022
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Santa Maria Stormwater Monitoring (R3_SM_Storm) data for Main Street Canal to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [S-MainSt Channel]
Temporal Representation:	Data was collected over the time period 12/2/2005-3/17/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42090, Fecal Coliform **Region 3**

Main Street Channel

LOE ID:	50825
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 19 of 23 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42090, Fecal Coliform **Region 3**

Main Street Channel

LOE ID:	50828
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	23
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 3 of 23 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**32407**	**Region 3**
Main Street Channel		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Nineteen lines of evidence are available in the administrative record to assess this pollutant. Thirty-two of the 55 nitrate samples and 57 of the 86 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Fifty-three of the 55 nitrate samples and 70 of the 74 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment. 1) Dissolved oxygen for this water body ranged from 5.3 mg/L to 14.9 mg/L, exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Floating mats ranged from 0 to 75 % cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3) Water column chlorophyll a concentration peaked at 38 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 3.90 mg/L to 5.25 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). 5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 91 g/m2 ash-free dry weight (AFDW) to 107 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006). 6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 228 mg/m2 to 263 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-two of the 55 nitrate samples and 57 of the 86 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Fifty-three of the 55 nitrate samples and 70 of the 74 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment.. 4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on 03/08/2016. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID: 50807

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 15 of 23 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	50806
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 14 of 23 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	50864
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 22 of 23 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal

	at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	50785
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 22 of 23 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	50847
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 22 of 23 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	50771
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 22 of 23 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	28115
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	13

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria). Thirteen of the 14 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	28114
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria). Thirteen of the 14 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	48402
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 15 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	48418
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	48
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 48 of 51 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	48417
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	51
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 34 of 51 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	48405

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	48
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 48 of 51 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	48404
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 15 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	48403
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 10 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	9842
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 8 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	14810
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Santa Maria Stormwater Monitoring (R3_SM_Storm) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [S-MainSt Channel]
Temporal Representation:	Data was collected over the time period 12/2/2005-3/17/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	28154
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: City of Santa Maria Stormwater Monitoring (R3_SM_Storm)
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [S-MainSt Channel]
Temporal Representation:	Data was collected over the time period 12/2/2005-3/17/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	These data were collected following storm water events.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	28153
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: City of Santa Maria Stormwater Monitoring (R3_SM_Storm)
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [S-MainSt Channel]
Temporal Representation:	Data was collected over the time period 12/2/2005-3/17/2006. City of Santa Maria monitoring is conducted following rain events of more than one inch.
Environmental Conditions:	These data were collected following storm water events.
QAPP Information:	No Quality Assurance information is available for this data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32407, Nitrate **Region 3**

Main Street Channel

LOE ID:	15231
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water

Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42236	Region 3
Main Street Channel		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Thirty lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Eight LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and six additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess toxic effects in sediment samples. Seven of the seven sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Twenty-two LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twenty-two additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-nine total samples are available to assess toxic effects in water samples. Nineteen of the twenty-nine water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 7 sediment samples and 19 of the 29 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life

protection and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Pesticide and Toxicity TMDL was approved by USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24183
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24014
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24003
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24156

Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24165
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24182
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24155
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Invertebrate Survival (%) including both Hyalella and Ceriodaphnia. Toxicity is defined by SWAMP

	(2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24157
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24166
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24184
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24129
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24138
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24004
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24128
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSS- Main Street Canal at South-Daylight Location, 312MSD-Main Street Canal u/s Ray Road at Highway 166]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24002
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24015
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24139
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	24148
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Invertebrate Survival (%). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing].
Temporal Representation:	Data was collected on a single day 2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	79051
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected sties on Main Street Canal on to evaluate water toxicity. One of the samples exhibited significant toxicity to multiple test organisms. The toxicity test included total cell count of Selenastrum capricornutum, survival and reproduction of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. The sample

	collected at 312MSD was toxic to all three test organisms. The sample from 312MSD was toxic to both C. dubia and to P. promelas. This sample was also reported as having a significant toxic effect to the total cell count of S. capricornutum. However, the conductivity of this sample was greater than 1500 uS/cm, the threshold at which a high salinity control sample should be used to calculate the test statistics. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects, the S. capricornutum result is not counted as an exceedance here.
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 312MSS (Main Street Canal at daylight point) and 312MSD (Main Street Canal at Main Street bridge).
Temporal Representation:	The samples were collected in June 2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	79054
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity and the one sample exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. The sample collected at 312MSD resulted in complete mortality to Hyalella and therefore the growth endpoint was not evaluated. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312MSDxxx.
Temporal Representation:	The sample was collected in April 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	79050
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. Three of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in three samples 10/21/2008, 02/3/2009, 3/31/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Ditch.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	

QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	79055
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	79052
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14

Number of Exceedances:	12
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Fourteen samples were collected to evaluate water toxicity.Twelve of the fourteen samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia (11 samples) and Hyalella Azteca (1 sample), Cyprinodon variegatus (1 sample), Pimephales promelas (2 samples), and Selenastrum capricornutum (3 samples).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312MSD-Main Street Canal at Highway 166 under-crossing and 312MSS- Main Street Canal at South-Daylight Location.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	79053
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to evaluate sediment toxicity. Four of the four samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the

control.

Guideline Reference:

Spatial Representation: The samples were collected at 312MSD-Main Street Canal at Highway 166 under-crossing and 312MSS- Main Street Canal at South-Daylight Location.

Temporal Representation: The samples were collected in April 2007, 2008 and 2009.

Environmental Conditions:

QAPP Information: The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID: 54920

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: One sample was collected to evaluate sediment toxicity and the one sample exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. The sample collected at 312MSD resulted in complete mortality to Hyalella and therefore the growth endpoint was not evaluated. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference: Santa Maria Rotation 2007 2008

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.

Guideline Reference: Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation: The sample was collected at station 312MSDxxx.

Temporal Representation: The sample was collected in April 2008.

Environmental Conditions:

QAPP Information: The SWAMP QAPP (2002) was followed.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	54915
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to evaluate sediment toxicity. Four of the four samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312MSD-Main Street Canal at Highway 166 under-crossing and 312MSS- Main Street Canal at South-Daylight Location.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	54916
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. Three of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in three samples 10/21/2008, 02/3/2009, 3/31/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Ditch.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	54917
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	12
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Fourteen samples were collected to evaluate water toxicity.Twelve of the fourteen samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia (11 samples) and Hyalella Azteca (1 sample), Cyprinodon variegatus (1 sample), Pimephales promelas (2 samples), and Selenastrum capricornutum (3 samples).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312MSD-Main Street Canal at Highway 166 under-crossing and 312MSS- Main Street Canal at South-Daylight Location.

Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	54918
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42236, Toxicity **Region 3**

Main Street Channel

LOE ID:	54919
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected sties on Main Street Canal on to evaluate water toxicity. One of the samples exhibited significant toxicity to multiple test organisms. The toxicity test included total cell count of Selenastrum capricornutum, survival and reproduction of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. The sample collected at 312MSD was toxic to all three test organisms. The sample from 312MSD was toxic to both C. dubia and to P. promelas. This sample was also reported as having a significant toxic effect to the total cell count of S. capricornutum. However, the conductivity of this sample was greater than 1500 uS/cm, the threshold at which a high salinity control sample should be used to calculate the test statistics. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects, the S. capricornutum result is not counted as an exceedance here.
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 312MSS (Main Street Canal at daylight point) and 312MSD (Main Street Canal at Main Street bridge).
Temporal Representation:	The samples were collected in June 2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID	48083	Region 3
Main Street Channel		

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life uses (National Recommended Water

Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48083, Azinphos-methyl (Guthion) **Region 3**

Main Street Channel

LOE ID:	54890
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main

	Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48083, Azinphos-methyl (Guthion) **Region 3**

Main Street Channel

LOE ID:	54885
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48094** **Region 3**

Main Street Channel

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. The single water sample did exceed the evaluation guideline for aquatic life uses (Fojut, T.L. et al., 2012). The single sediment sample did exceed the evaluation guideline for aquatic life uses (Amweg, 2005) and was toxic to the invertebrate test organism. This water segments is listed for sediment toxicity. This sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the evaluation guidelines for aquatic life in both water and sediment however, this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48094, Bifenthrin **Region 3**

Main Street Channel

LOE ID:	54892
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48094, Bifenthrin **Region 3**

Main Street Channel

LOE ID:	54893
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48094, Bifenthrin **Region 3**

Main Street Channel

LOE ID:	54918
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48094, Bifenthrin **Region 3**

Main Street Channel

LOE ID:	54891
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48094, Bifenthrin **Region 3**

Main Street Channel

LOE ID:	54898
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48094, Bifenthrin **Region 3**

Main Street Channel

LOE ID:	79055
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48154** **Region 3**

Main Street Channel

Pollutant: **Chlordane**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection and this sample resulted in a significant toxic effect to the invertebrate test organism. This waterbody is on the 303(d) List for sediment toxicity. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the evaluation guideline but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48154, Chlordane **Region 3**

Main Street Channel

LOE ID:	79055
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48154, Chlordane **Region 3**

Main Street Channel

LOE ID:	54918
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48154, Chlordane — Region 3

Main Street Channel

LOE ID:	54899
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48154, Chlordane — Region 3

Main Street Channel

LOE ID:	54900
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **42192** **Region 3**

Main Street Channel

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 94 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 94 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42192, Chlorophyll-a **Region 3**

Main Street Channel

LOE ID:	50770
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42192, Chlorophyll-a **Region 3**

Main Street Channel

LOE ID:	50846

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42192, Chlorophyll-a **Region 3**

Main Street Channel

LOE ID:	14292
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42192, Chlorophyll-a **Region 3**

Main Street Channel

LOE ID:	48381
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42192, Chlorophyll-a **Region 3**

Main Street Channel

LOE ID:	48382
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42192, Chlorophyll-a **Region 3**

Main Street Channel

LOE ID:	14291
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42192, Chlorophyll-a **Region 3**

Main Street Channel

LOE ID:	9795
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42192, Chlorophyll-a **Region 3**

Main Street Channel

LOE ID:	9794
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/12/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48098**	**Region 3**
Main Street Channel		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. The single water sample did exceed the evaluation guideline for aquatic life uses (Fojut, T.L. et al., 2012). The single sediment sample did exceed the evaluation guideline for aquatic life uses (Amweg, 2005) and was toxic to the invertebrate test organism. This water segments is listed for sediment toxicity. This sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the evaluation guidelines for aquatic life in both water and sediment however, this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48098, Cyfluthrin **Region 3**

Main Street Channel

LOE ID:	79055
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48098, Cyfluthrin **Region 3**

Main Street Channel

LOE ID:	54820
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyfluthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48098, Cyfluthrin **Region 3**

Main Street Channel

LOE ID:	54810
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48098, Cyfluthrin **Region 3**

Main Street Channel

LOE ID:	54821
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyfluthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48098, Cyfluthrin **Region 3**

Main Street Channel

LOE ID:	54819
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48098, Cyfluthrin **Region 3**

Main Street Channel

LOE ID:	54918
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48118** **Region 3**

Main Street Channel

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. The single water sample did exceed the evaluation guideline for aquatic life uses (Fojut, T.L. et al., 2012). The single sediment sample did exceed the evaluation guideline for aquatic life uses (Amweg et al., 2005) and was toxic to the invertebrate test organism. This water segments is listed for sediment toxicity. This sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the evaluation guidelines for aquatic life in both water and sediment however, this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48118, Cyhalothrin, Lambda **Region 3**

Main Street Channel

LOE ID:	54822
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48118, Cyhalothrin, Lambda **Region 3**

Main Street Channel

LOE ID:	54918
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48118, Cyhalothrin, Lambda **Region 3**

Main Street Channel

LOE ID:	54833
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48118, Cyhalothrin, Lambda **Region 3**

Main Street Channel

LOE ID:	54832
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]

Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48118, Cyhalothrin, Lambda **Region 3**

Main Street Channel

LOE ID:	54831
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48118, Cyhalothrin, Lambda **Region 3**

Main Street Channel

LOE ID:	79055
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48099**	**Region 3**
Main Street Channel		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. The single water sample did exceed the evaluation guideline for aquatic life uses (Fojut, T.L. et al., 2012). The single sediment sample did exceed the evaluation guideline for aquatic life uses (Maund, 2002) and was toxic to the invertebrate test organism. This water segments is listed for sediment toxicity. This sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the evaluation guidelines for aquatic life in both water and sediment however, this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48099, Cypermethrin **Region 3**

Main Street Channel

LOE ID:	79055
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48099, Cypermethrin **Region 3**

Main Street Channel

LOE ID:	54834
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48099, Cypermethrin **Region 3**

Main Street Channel

LOE ID:	54843
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine

	beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48099, Cypermethrin **Region 3**

Main Street Channel

LOE ID:	54845
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48099, Cypermethrin **Region 3**

Main Street Channel

LOE ID:	54918
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48099, Cypermethrin **Region 3**

Main Street Channel

LOE ID:	54844
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48156**	**Region 3**
Main Street Channel		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection and this sample resulted in a significant toxic effect to the invertebrate test organism. This waterbody is on the 303(d) List for sediment toxicity. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient

information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the evaluation guideline but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48156, DDD (Dichlorodiphenyldichloroethane) Region 3

Main Street Channel

LOE ID:	54846
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48156, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Main Street Channel

LOE ID:	54918
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48156, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Main Street Channel

LOE ID:	54811
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48156, DDD (Dichlorodiphenyldichloroethane) Region 3

Main Street Channel

LOE ID:	79055
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	

Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48158 Region 3

Main Street Channel

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection and this sample resulted in a significant toxic effect to the invertebrate test organism. This waterbody is on the 303(d) List for sediment toxicity. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the evaluation guideline but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48158, DDE (Dichlorodiphenyldichloroethylene) Region 3

Main Street Channel

LOE ID:	79055
Pollutant:	Toxicity
LOE Subgroup:	Toxicity

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48158, DDE (Dichlorodiphenyldichloroethylene) Region 3

Main Street Channel

LOE ID:	54812
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48158, DDE (Dichlorodiphenyldichloroethylene) Region 3

Main Street Channel

LOE ID:	54813
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48158, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Main Street Channel

LOE ID:	54918
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48153** **Region 3**

Main Street Channel

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single

sample did not exceed the evaluation guidelines for Â“Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)Â” or for the DDT isomer used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guidelines for Â“Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)Â” or for the DDT isomer and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48153, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Main Street Channel

LOE ID:	54823
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48153, DDT (Dichlorodiphenyltrichloroethane) Region 3

Main Street Channel

LOE ID:	54913
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48153, DDT (Dichlorodiphenyltrichloroethane) Region 3

Main Street Channel

LOE ID:	54912
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48153, DDT (Dichlorodiphenyltrichloroethane) Region 3

Main Street Channel

LOE ID:	54814
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48121** **Region 3**

Main Street Channel

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life uses (Fojut, T.L. et al., 2012). The single sediment sample did not exceed the evaluation guideline for aquatic life uses (Amweg et al., 2005). This sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the evaluation guidelines for aquatic life in both water and sediment however, this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48121, Deltamethrin **Region 3**

Main Street Channel

LOE ID:	54824
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48121, Deltamethrin **Region 3**

Main Street Channel

LOE ID:	54826
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48121, Deltamethrin **Region 3**

Main Street Channel

LOE ID:	54825
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48121, Deltamethrin **Region 3**

Main Street Channel

LOE ID:	54835
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L

	and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48163 Region 3

Main Street Channel

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline for aquatic life uses (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48163, Demeton Region 3

Main Street Channel

LOE ID:	54836
Pollutant:	Demeton

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48163, Demeton **Region 3**

Main Street Channel

LOE ID:	54849
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are

	reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48163, Demeton **Region 3**

Main Street Channel

LOE ID:	54848
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]

Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48163, Demeton **Region 3**

Main Street Channel

LOE ID:	54847
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48163, Demeton **Region 3**

Main Street Channel

LOE ID:	54837
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48163, Demeton **Region 3**

Main Street Channel

LOE ID:	54838
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection

	Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 48164 Region 3

Main Street Channel

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48164, Dichlorvos Region 3

Main Street Channel

LOE ID:	54861
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48164, Dichlorvos **Region 3**

Main Street Channel

LOE ID:	54860
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48164, Dichlorvos **Region 3**

Main Street Channel

LOE ID:	54863
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.

Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48164, Dichlorvos **Region 3**

Main Street Channel

LOE ID:	54864
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]

Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48164, Dichlorvos **Region 3**

Main Street Channel

LOE ID:	54862
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48164, Dichlorvos **Region 3**

Main Street Channel

LOE ID:	54866
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48164, Dichlorvos **Region 3**

Main Street Channel

LOE ID:	54865
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48164, Dichlorvos **Region 3**

Main Street Channel

LOE ID:	79072
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Summary for the Compound Dichlorvos Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48164, Dichlorvos **Region 3**

Main Street Channel

LOE ID:	79071
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Summary for the Compound Dichlorvos Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 48155 Region 3

Main Street Channel

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48155, Dieldrin — Region 3

Main Street Channel

LOE ID:	54868
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48155, Dieldrin **Region 3**

Main Street Channel

LOE ID:	54867
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48165 Region 3

Main Street Channel

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (California Department of Health Services notification level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48165, Dimethoate Region 3

Main Street Channel

LOE ID:	54873
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48165, Dimethoate **Region 3**

Main Street Channel

LOE ID:	54874
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48165, Dimethoate **Region 3**

Main Street Channel

LOE ID:	54875
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.

QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48165, Dimethoate **Region 3**

Main Street Channel

LOE ID:	54876
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48165, Dimethoate **Region 3**

Main Street Channel

LOE ID:	54869
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48165, Dimethoate **Region 3**

Main Street Channel

LOE ID:	54872
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48165, Dimethoate **Region 3**

Main Street Channel

LOE ID:	54877
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48165, Dimethoate **Region 3**

Main Street Channel

LOE ID:	54871
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48165, Dimethoate **Region 3**

Main Street Channel

LOE ID:	54870
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels

Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48166** **Region 3**

Main Street Channel

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48166, Disulfoton **Region 3**

Main Street Channel

LOE ID:	54881
Pollutant:	Disulfoton

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48166, Disulfoton **Region 3**

Main Street Channel

LOE ID:	54880
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48166, Disulfoton **Region 3**

Main Street Channel

LOE ID:	54886
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48160 Region 3

Main Street Channel

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48160, Endrin — Region 3

Main Street Channel

LOE ID:	54888
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48160, Endrin **Region 3**

Main Street Channel

LOE ID:	54887
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48132 Region 3

Main Street Channel

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs Ecotoxicity database). The single sediment sample did not exceed the evaluation guideline for aquatic life uses (Amweg et al., 2005). This sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life uses and the single sediment sample did not exceed the evaluation guideline for aquatic life uses. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48132, Esfenvalerate/Fenvalerate Region 3

Main Street Channel

LOE ID:	54889
Pollutant:	Esfenvalerate/Fenvalerate

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48132, Esfenvalerate/Fenvalerate **Region 3**

Main Street Channel

LOE ID:	54897
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48132, Esfenvalerate/Fenvalerate **Region 3**

Main Street Channel

LOE ID:	54902
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]

Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48132, Esfenvalerate/Fenvalerate **Region 3**

Main Street Channel

LOE ID:	54894
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48167** **Region 3**

Main Street Channel

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined in USEPA, 1985). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48167, Ethoprop **Region 3**

Main Street Channel

LOE ID:	54910
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48167, Ethoprop **Region 3**

Main Street Channel

LOE ID:	54905
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main

	Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48167, Ethoprop **Region 3**

Main Street Channel

LOE ID:	54904
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48167, Ethoprop **Region 3**

Main Street Channel

LOE ID:	54903
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48167, Ethoprop **Region 3**

Main Street Channel

LOE ID:	54911
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are

	reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48167, Ethoprop **Region 3**

Main Street Channel

LOE ID:	54909
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration

	(MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48161**	**Region 3**
Main Street Channel		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48161, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Main Street Channel

LOE ID:	54803
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48161, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Main Street Channel

LOE ID:	54804
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48093** **Region 3**

Main Street Channel

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48093, Methidathion **Region 3**

Main Street Channel

LOE ID:	54830
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48093, Methidathion — Region 3

Main Street Channel

LOE ID:	54829
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48093, Methidathion — Region 3

Main Street Channel

LOE ID:	54839
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48135**	**Region 3**
Main Street Channel		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eleven lines of evidence are available in the administrative record to assess this pollutant. Zero of the six water samples exceed the evaluation guideline for aquatic life uses (CDFG, 1992). The single sediment sample did not exceed the evaluation guideline for aquatic life uses (Ding et al., 2011). This sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the six water samples exceed the evaluation guideline for aquatic life uses and the single sediment sample did not exceed the evaluation guideline for aquatic life uses. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion **Region 3**

Main Street Channel

LOE ID:	54842
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion — Region 3

Main Street Channel

LOE ID:	54925
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion — Region 3

Main Street Channel

LOE ID:	54926
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion **Region 3**

Main Street Channel

LOE ID:	54927
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion **Region 3**

Main Street Channel

LOE ID:	54928
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion **Region 3**

Main Street Channel

LOE ID:	54929
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion **Region 3**

Main Street Channel

LOE ID:	54841
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion **Region 3**

Main Street Channel

LOE ID:	54840
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6

	ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion **Region 3**

Main Street Channel

LOE ID:	54924
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion — Region 3

Main Street Channel

LOE ID:	54923
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48135, Methyl Parathion — Region 3

Main Street Channel

LOE ID:	54930
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48162	Region 3
Main Street Channel		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48162, PCBs (Polychlorinated biphenyls) **Region 3**

Main Street Channel

LOE ID:	54940
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48162, PCBs (Polychlorinated biphenyls) **Region 3**

Main Street Channel

LOE ID:	54941
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48087**	**Region 3**
Main Street Channel		

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life uses (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3 The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48087, Parathion **Region 3**

Main Street Channel

LOE ID:	54938
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48087, Parathion **Region 3**

Main Street Channel

LOE ID:	54939
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48136** **Region 3**

Main Street Channel

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. The single water

sample did exceed exceed the evaluation guideline for aquatic life uses (Amweg et al., 2005). The single sediment sample did exceed the evaluation guideline for aquatic life uses (Fojut et al. 2012) and was toxic to the invertebrate test organism. This water segments is listed for sediment toxicity.

This sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single samples did exceed the evaluation guidelines for aquatic life in both water and sediment and the water segment is on the 303(d) List for toxicity in sediment. However, this sample and exceedance count does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48136, Permethrin, total **Region 3**

Main Street Channel

LOE ID:	54918
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	

Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48136, Permethrin, total **Region 3**

Main Street Channel

LOE ID:	54945
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin, Total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48136, Permethrin, total **Region 3**

Main Street Channel

LOE ID:	54942

Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48136, Permethrin, total **Region 3**

Main Street Channel

LOE ID:	54943
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48136, Permethrin, total **Region 3**

Main Street Channel

LOE ID:	54944
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin, Total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used.

	Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48136, Permethrin, total **Region 3**

Main Street Channel

LOE ID:	79055
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Main Street Canal station 312MSS.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48169** **Region 3**

Main Street Channel

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48169, Phorate **Region 3**

Main Street Channel

LOE ID:	54957
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48169, Phorate **Region 3**

Main Street Channel

LOE ID:	54953
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48169, Phorate **Region 3**

Main Street Channel

LOE ID:	54952
Pollutant:	Phorate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48169, Phorate **Region 3**

Main Street Channel

LOE ID:	54955
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are

	reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48169, Phorate **Region 3**

Main Street Channel

LOE ID:	54956
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Line of Evidence (LOE) for Decision ID 48169, Phorate **Region 3**

Main Street Channel

LOE ID:	54954
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48169, Phorate **Region 3**

Main Street Channel

LOE ID:	54958
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48169, Phorate **Region 3**

Main Street Channel

LOE ID:	54959
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48169, Phorate **Region 3**

Main Street Channel

LOE ID:	54951
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

QAPP Information Reference(s):	QA data are included in submission. All data are flagged as appropriate. Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48090** **Region 3**

Main Street Channel

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs, 2011) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3 The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48090, Phosmet **Region 3**

Main Street Channel

LOE ID:	54962
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48090, Phosmet **Region 3**

Main Street Channel

LOE ID:	54961
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48090, Phosmet **Region 3**

Main Street Channel

LOE ID:	54960
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **42395** **Region 3**

Main Street Channel

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 101 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Although this evaluation guideline is specific to steelhead trout and there is no record of the Main Street Canal having potential or historic habitat for steelhead trout, this waterbody is a tributary to the Santa Maria River which is identified as supporting steelhead population and migration runs to the upper watershed in Becker, G.S. and I.J. Reining (2008). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Twenty-two of the 101 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42395, Temperature, water **Region 3**

Main Street Channel

LOE ID:	13333
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be

	demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42395, Temperature, water **Region 3**

Main Street Channel

LOE ID:	14242
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]

Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42395, Temperature, water **Region 3**

Main Street Channel

LOE ID:	13354
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42395, Temperature, water **Region 3**

Main Street Channel

LOE ID:	48372

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 10 of 51 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42395, Temperature, water **Region 3**

Main Street Channel

LOE ID:	50803
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 5 of 23 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47333**	**Region 3**
Main Street Channel		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Collection System Failure | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for addition on the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Sixteen of 23 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixteen of 23 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on

04/24/2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

Line of Evidence (LOE) for Decision ID 47333, Escherichia coli (E. coli) **Region 3**

Main Street Channel

LOE ID:	50826
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 16 of 23 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **48168** **Region 3**

Main Street Channel

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture

TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Four of the six samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (Palumbo, A.J., et al., 2012) and these beneficial uses are not supported. Zero of the six sample exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the six samples exceed the evaluation guidelines and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. The Santa Maria River Watershed Pesticide and Toxicity TMDL has been approved by the USEPA on August 31, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48168, Malathion **Region 3**

Main Street Channel

LOE ID:	54816
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial

	use support and results are as follows: 2 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48168, Malathion **Region 3**

Main Street Channel

LOE ID:	54807
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48168, Malathion **Region 3**

Main Street Channel

LOE ID:	54818
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48168, Malathion **Region 3**

Main Street Channel

LOE ID:	54817
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48168, Malathion **Region 3**

Main Street Channel

LOE ID:	54828
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48168, Malathion **Region 3**

Main Street Channel

LOE ID:	54815
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48168, Malathion **Region 3**

Main Street Channel

LOE ID:	54805
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48168, Malathion **Region 3**

Main Street Channel

LOE ID:	54827
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this

	calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Ditch - 312MSS]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48168, Malathion **Region 3**

Main Street Channel

LOE ID:	54806
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [Main Street Canal - 312MSD]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42181**	**Region 3**
Main Street Channel		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Twenty lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 98 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and the use support rating for this use is set to Not Supporting. Five of the 98 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and the use support rating for this use is set to Fully Supporting. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of the 98 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Santa Maria River Watershed Nutrient TMDL was approved by USEPA on March 8, 2016.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	50787
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 7 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	50865
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to

	determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	50786
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 3 of 23 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	50866
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 7 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSD-Main Street Canal at Highway 166 undercrossing, 312MSSxxx - Main Street Canal at daylight point]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	48419
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	48
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 12 of 48 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	14306
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen

	concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	14293
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	14308
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	14307
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 12/15/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	13607
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	13606
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	13624
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	13623

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 2/3/2000-1/29/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	13337
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	13336
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]

Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	13335
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	13334
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Main Street Canal to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 1 monitoring site [312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	48353
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 20 of 48 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality

	conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	48421
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 20 of 48 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42181, Oxygen, Dissolved **Region 3**

Main Street Channel

LOE ID:	48420
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Main Street Canal to determine beneficial use support and results are as follows: 4 of 48 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Main Street Canal was collected at 2 monitoring sites [312MSSxxx - Main Street Canal at daylight point, 312MSD-Main Street Canal at Highway 166 undercrossing]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Sisquoc River**
Water Body ID: **CAR3121003020020124144528**
Water Body Type: **River & Stream**

DECISION ID **38904** **Region 3**
Sisquoc River

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 27 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 31 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 27 samples exceed the water quality objective for unionized ammonia and zero of the 31 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38904, Ammonia **Region 3**
Sisquoc River

LOE ID: 9832

Pollutant: Ammonia (Unionized)
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38904, Ammonia **Region 3**

Sisquoc River

LOE ID:	9815
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38904, Ammonia **Region 3**

Sisquoc River

LOE ID:	9844
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]

Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38904, Ammonia **Region 3**

Sisquoc River

LOE ID:	52561
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38904, Ammonia **Region 3**

Sisquoc River

LOE ID:	52524

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38904, Ammonia **Region 3**

Sisquoc River

LOE ID:	52602
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37030 Region 3

Sisquoc River

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37030, Boron Region 3

Sisquoc River

LOE ID:	52503
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37030, Boron **Region 3**

Sisquoc River

LOE ID:	9816
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for

	Sisquoc River to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**53173**	**Region 3**
Sisquoc River		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the water quality objective for agricultural uses when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each monitoring station and neither of the calculated annual mean values exceed the site specific objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the calculated annual mean values exceed the site specific objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53173, Chloride **Region 3**

Sisquoc River

LOE ID:	52598
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chloride.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39348** **Region 3**

Sisquoc River

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 30 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39348, Chlorophyll-a **Region 3**

Sisquoc River

LOE ID:	52525
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39348, Chlorophyll-a **Region 3**

Sisquoc River

LOE ID:	52616
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]

Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39348, Chlorophyll-a **Region 3**

Sisquoc River

LOE ID:	9817
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39348, Chlorophyll-a **Region 3**

Sisquoc River

LOE ID:	9829
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	48829	Region 3
Sisquoc River		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Two of 9 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 9 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48829, Escherichia coli (E. coli)	**Region 3**
Sisquoc River	

LOE ID:	52580
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37101**	**Region 3**
Sisquoc River		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of 29 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 0 of 29 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 29 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 29 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37101, Fecal Coliform — Region 3

Sisquoc River

LOE ID:	52582
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37101, Fecal Coliform — Region 3

Sisquoc River

LOE ID:	52579
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37101, Fecal Coliform **Region 3**

Sisquoc River

LOE ID:	11535
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period

exceed 4000/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]

Temporal Representation: Data was collected over the time period 1/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37101, Fecal Coliform **Region 3**

Sisquoc River

LOE ID: 11534

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Coliform, Fecal.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]

Temporal Representation: Data was collected over the time period 1/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38007	Region 3
Sisquoc River		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 31 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. These beneficial uses are fully supported. The most recent nine samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Zero of the nine samples exceed the evaluation guideline and there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 31 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. Zero of the nine samples exceed the evaluation guideline and there is no supporting evidence indicating high risk for, or occurrence of, eutrophication. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38007, Nitrate	**Region 3**
Sisquoc River	

LOE ID:	9831
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38007, Nitrate **Region 3**

Sisquoc River

LOE ID:	9830
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38007, Nitrate **Region 3**

Sisquoc River

LOE ID:	52506
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38007, Nitrate **Region 3**

Sisquoc River

LOE ID:	52505
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38007, Nitrate **Region 3**

Sisquoc River

LOE ID:	52540
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38007, Nitrate **Region 3**

Sisquoc River

LOE ID:	52541
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38007, Nitrate **Region 3**

Sisquoc River

LOE ID:	52618
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38007, Nitrate **Region 3**

Sisquoc River

LOE ID:	52617
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38007, Nitrate **Region 3**

Sisquoc River

LOE ID:	52563
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38007, Nitrate **Region 3**

Sisquoc River

LOE ID:	52562
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53498** **Region 3**

Sisquoc River

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a

minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53498, Nitrogen, Nitrite **Region 3**

Sisquoc River

LOE ID:	52522
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	39353	Region 3
Sisquoc River		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. One of the 31 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 31 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 31 samples exceeded the water quality objective Cold Freshwater Habitats and 0 of the 31 samples exceeded the water quality objective for Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved	**Region 3**
Sisquoc River	

LOE ID:	52635
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved **Region 3**

Sisquoc River

LOE ID:	52543
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved **Region 3**

Sisquoc River

LOE ID:	52542
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved **Region 3**

Sisquoc River

LOE ID:	52619
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved **Region 3**

Sisquoc River

LOE ID:	13429
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved **Region 3**

Sisquoc River

LOE ID:	13394
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved — Region 3

Sisquoc River

LOE ID:	13393
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved — Region 3

Sisquoc River

LOE ID:	13451
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected on a single day 6/30/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	This sample was collected in a location that is not representative of the conditions in the River. Staff measured dissolved oxygen in a large pool, less than 500 feet upstream from where the River went dry because night time access to the upstream reaches was not possible.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved **Region 3**

Sisquoc River

LOE ID:	13450
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected on a single day 6/30/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved **Region 3**

Sisquoc River

LOE ID:	13449
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected on a single day 6/30/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved — Region 3

Sisquoc River

LOE ID:	13428
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39353, Oxygen, Dissolved — Region 3

Sisquoc River

LOE ID:	13410
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected on a single day 6/30/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	This sample was collected in a location that is not representative of the conditions in the River. Staff measured dissolved oxygen in a large pool, less than 500 feet upstream from where the River went dry because night time access to the upstream reaches was not possible.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**53499**	**Region 3**
Sisquoc River		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Annual means were calculated for the data associated with each monitoring station and the results are as follows: Stations 312SIV and 312SIS are compared to the site specific objective (annual mean of 50 mg/L) and station. One of the two annual means calculated for these stations exceeds the site specific water quality objective. This sample size (as annual means) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the two annual means calculated for these stations exceeds the site specific water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53499, Sodium **Region 3**
Sisquoc River

LOE ID:	52600
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 1 of 2 annual mean values exceed the site specific objective for Sodium.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L applied as an annual mean.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIV-Sisquoc River u/s Tepusquet Road, 312SIS-Sisquoc River at Santa Maria Way].
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37057** **Region 3**
Sisquoc River

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 31 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 31 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37057, Specific Conductivity **Region 3**

Sisquoc River

LOE ID:	52504
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37057, Specific Conductivity **Region 3**

Sisquoc River

LOE ID:	11575
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37057, Specific Conductivity **Region 3**

Sisquoc River

LOE ID:	11574
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37913** **Region 3**

Sisquoc River

Pollutant: **Temperature, water**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 31 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 31 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37913, Temperature, water **Region 3**

Sisquoc River

LOE ID:	13412
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37913, Temperature, water **Region 3**

Sisquoc River

LOE ID:	13448
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 2 of 19 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37913, Temperature, water **Region 3**

Sisquoc River

LOE ID:	52560
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39401** **Region 3**

Sisquoc River

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Two of the 22 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 0 of the 22 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 22 samples exceed the evaluation guideline for Cold Freshwater Habitat and 0 of the 22 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39401, Turbidity **Region 3**

Sisquoc River

LOE ID:	52559
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]

Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39401, Turbidity **Region 3**

Sisquoc River

LOE ID:	52637
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39401, Turbidity **Region 3**

Sisquoc River

LOE ID:	13414
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39401, Turbidity **Region 3**

Sisquoc River

LOE ID:	13413
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 8/2/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39401, Turbidity **Region 3**

Sisquoc River

LOE ID:	13447
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39401, Turbidity **Region 3**

Sisquoc River

LOE ID:	13431
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37911** **Region 3**

Sisquoc River

Pollutant: **pH**

Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Four of the 32 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 10 of the 32 samples exceed the water quality objective for Agricultural Supply, and 12 of the 32 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. However, there are no anthropogenic causes of elevated pH in this watershed and this condition is likely natural. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 32 samples exceed the water quality objective for Agricultural Supply, and 12 of the 32 samples exceed the water quality objectives for Drinking Water and Recreation. All of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded. However, there are no anthropogenic causes of elevated pH in this watershed and the geology of the watershed can explain the elevated pH levels.

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11301
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11302
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11298
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11299
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11300
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11576
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Sisquoc River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 1 monitoring site [312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11516
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 3 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11517
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 10 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11518
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 10 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11519
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 10 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11520
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Sisquoc River to determine beneficial use support and results are as follows: 3 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	11500
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	20
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for

	Sisquoc River to determine beneficial use support and results are as follows: 8 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/20/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	52597
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-

	Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	52523
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	52581
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	52636
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	52578
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37911, pH **Region 3**

Sisquoc River

LOE ID:	52544
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Sisquoc River to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Sisquoc River was collected at 2 monitoring sites [312SIS-Sisquoc River at Santa Maria Way, 312SIV-Sisquoc River u/s Tepusquet Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Oso Flaco Creek**
Water Body ID: **CAR3121003020020124122144**
Water Body Type: **River & Stream**

DECISION ID **41342** **Region 3**
Oso Flaco Creek

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 24 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 24 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41342, Chloride **Region 3**
Oso Flaco Creek

LOE ID: 9641

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	17
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 5 of 17 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41342, Chloride **Region 3**

Oso Flaco Creek

LOE ID:	51068
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Chloride.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41675** **Region 3**

Oso Flaco Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 25 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-four of the 25 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41675, Sodium **Region 3**

Oso Flaco Creek

LOE ID:	51088
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Sodium.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41675, Sodium **Region 3**

Oso Flaco Creek

LOE ID:	9657
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 16 of 17 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**33355**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which 29 of the 88 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and one of the 112 samples exceed the EPA's Lifetime Health advisory level for total ammonia in

drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-nine of the 88 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on March 8, 2016.

5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 33355, Ammonia **Region 3**

Oso Flaco Creek

LOE ID:	51103
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33355, Ammonia **Region 3**

Oso Flaco Creek

LOE ID:	51142
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33355, Ammonia **Region 3**

Oso Flaco Creek

LOE ID:	14304

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33355, Ammonia **Region 3**

Oso Flaco Creek

LOE ID:	48726
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	65
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 65 samples exceed the criterion for Ammonia As N, Total.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33355, Ammonia **Region 3**

Oso Flaco Creek

LOE ID:	14323
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33355, Ammonia **Region 3**

Oso Flaco Creek

LOE ID:	9627
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33355, Ammonia — Region 3

Oso Flaco Creek

LOE ID:	9658
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road].
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33355, Ammonia — Region 3

Oso Flaco Creek

LOE ID:	48727
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	16

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 16 of 44 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 5/29/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**41794**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Fourteen of 24 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 3 of 24 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of 24 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Santa Maria River Watershed TMDL has been approved by USEPA on 04/24/2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41794, Fecal Coliform **Region 3**

Oso Flaco Creek

LOE ID:	11843
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 7 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41794, Fecal Coliform **Region 3**

Oso Flaco Creek

LOE ID:	11844
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41794, Fecal Coliform **Region 3**

Oso Flaco Creek

LOE ID:	51123
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41794, Fecal Coliform **Region 3**

Oso Flaco Creek

LOE ID:	51126
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42933**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Seventeen lines of evidence are available in the administrative record to assess this pollutant. Thirty-two of the 47 nitrate samples exceed the water quality objective for the Agricultural Supply beneficial use. Forty-seven of the 47 nitrate samples and82 of the 88 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial uses. Forty-seven of the 47 nitrate samples and all 70 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region NNE Technical Report, 2010) for Warm Freshwater Habitat. In addition, the following supporting evidence of eutrophication is provided:

1) Dissolved oxygen for this water body ranged from 3.85 mg/L to 13.83 mg/L, occasionally exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L or the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Visual observation of floating algal mats ranged up to 75% cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration ranged up to 100 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 3.46 mg/L to 4.58 mg/L. This exceeds the screening threshold for benthic algal contribution to

oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 79 g/m2 ash-free dry weight (AFDW) to 98 g/m2 AFDW, typically exceeding the warm water screening threshold of 80 grams/m2 (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 197 mg/m2 to 246 mg/m2, typically exceeding the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-two of the 47 nitrate samples exceed the water quality objective for the Agricultural Supply beneficial use. Forty-seven of the 47 nitrate samples and82 of the 88 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial uses. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Forty-seven of the 47 nitrate samples exceed the water quality objectives for Warm Freshwater Habitat. Seventy of the 70 nitrate/nitrite samples exceed the water quality objectives for Warm Freshwater Habitat. There is sufficient supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat.
5. The Santa Maria Watershed Nutrient TMDL has been approved by USEPA on 3/8/2016.
6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	51106
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	51145
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	51144
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	51105
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	51070
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 5 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	48764
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 17 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory

	Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312OSR - Oso Flaco Creek at Highway 1, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	48763
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 17 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312OSR - Oso Flaco Creek at Highway 1, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	48781
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	62
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 62 of 62 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312OSR - Oso Flaco Creek at Highway 1, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	48766
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	62
Number of Exceedances:	56
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 56 of 62 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312OSR - Oso Flaco Creek at Highway 1, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	9643
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 12 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate

	exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	9656
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 17 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	15217
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 18 of 18 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 3/22/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	14303
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	14302
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	48746
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 11 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312OSR - Oso Flaco Creek at Highway 1, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	27880
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42933, Nitrate **Region 3**

Oso Flaco Creek

LOE ID:	27881
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	44791	Region 3
Oso Flaco Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Four LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and five additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess toxic effects in sediment samples. Six of the seven sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Five LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twenty additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-seven total samples are available to assess toxic effects in water samples. Twenty of the twenty-seven water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 7 sediment samples and 20 of the 27 water samples resulted in a significant toxic effect to one or more test organisms for the water quality objective set for aquatic life protection. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 44791, Toxicity — Region 3

Oso Flaco Creek

LOE ID:	24604
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected on a single day 4/19/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44791, Toxicity — Region 3

Oso Flaco Creek

LOE ID:	24616
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44791, Toxicity **Region 3**

Oso Flaco Creek

LOE ID:	24615
Pollutant:	Vertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44791, Toxicity **Region 3**

Oso Flaco Creek

LOE ID:	24603
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected on a single day 5/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44791, Toxicity **Region 3**

Oso Flaco Creek

LOE ID:	24591
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 7/26/2005-2/23/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44791, Toxicity **Region 3**

Oso Flaco Creek

LOE ID:	55879
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. Five of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in five samples 10/21/2008,

	12/3/2008, 02/3/2009, 6/10/2009 and 8/26/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 312OFC - Oso Flaco Creek at Oso Flaco Creek Road.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44791, Toxicity **Region 3**

Oso Flaco Creek

LOE ID:	55881
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Oso Flaco Creek station 312OFC.
Temporal Representation:	The samples were collected in June of 2009.

Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 44791, Toxicity **Region 3**

Oso Flaco Creek

LOE ID:	55882
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to evaluate sediment toxicity. Four of the four samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312OFC-Oso Flaco Creek at Oso Flaco Lake Road and 312OSR-Oso Flaco Creek @ Hwy 1 @ south RR tressle.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. No QAPP provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44791, Toxicity **Region 3**

Oso Flaco Creek

LOE ID:	55880
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	14
Number of Exceedances:	12
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Fourteen samples were collected to evaluate water toxicity. Twelve of the 14 samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia, growth and survival of Pimephales promelas and growth of Selenastrum capricornutum.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312OFC-Oso Flaco Creek at Oso Flaco Lake Road and 312OSR-Oso Flaco Creek @ Hwy 1 @ south RR tressle.
Temporal Representation:	The samples were collected from 2007 to 2010 at station 312OFC and in January, March and September of 2008 at station 312OSR.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. No QAPP provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	48841	Region 3
Oso Flaco Creek		

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48841, Azinphos-methyl (Guthion) **Region 3**

Oso Flaco Creek

LOE ID:	55958
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48851** **Region 3**

Oso Flaco Creek

Pollutant: **Bifenthrin**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. The single sediment sample did not exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48851, Bifenthrin **Region 3**

Oso Flaco Creek

LOE ID:	55967
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48851, Bifenthrin **Region 3**

Oso Flaco Creek

LOE ID:	55966
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 41685 Region 3

Oso Flaco Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41685, Boron Region 3

Oso Flaco Creek

LOE ID:	51067
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41685, Boron **Region 3**

Oso Flaco Creek

LOE ID:	9640
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the

	maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41685, Boron **Region 3**

Oso Flaco Creek

LOE ID:	9659
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Boron.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 4/10/2000-6/26/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	48843	Region 3
Oso Flaco Creek		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48843, Chlordane	**Region 3**
Oso Flaco Creek	

LOE ID:	55968
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**41272**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 105 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 105 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41272, Chlorophyll-a **Region 3**

Oso Flaco Creek

LOE ID:	51143
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41272, Chlorophyll-a **Region 3**

Oso Flaco Creek

LOE ID:	9642
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41272, Chlorophyll-a **Region 3**

Oso Flaco Creek

LOE ID:	48728
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41272, Chlorophyll-a **Region 3**

Oso Flaco Creek

LOE ID:	14324
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48852**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection (and was not counted in this assessment because the result was reported as a 'non-detect' and the laboratory reporting limit is above the criteria). The single sediment sample did not exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48852, Cyfluthrin **Region 3**

Oso Flaco Creek

LOE ID:	55988
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48852, Cyfluthrin **Region 3**

Oso Flaco Creek

LOE ID:	55987
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48879	Region 3
Oso Flaco Creek		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. The single sediment sample did not exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48879, Cyhalothrin, Lambda	**Region 3**
Oso Flaco Creek	

LOE ID:	55998
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48879, Cyhalothrin, Lambda **Region 3**

Oso Flaco Creek

LOE ID:	55999
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48880** **Region 3**

Oso Flaco Creek

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection (and was not counted in this assessment because the result was reported as a 'non-detect' and the laboratory reporting limit is above the criteria). The single sediment sample did not exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48880, Cypermethrin **Region 3**

Oso Flaco Creek

LOE ID:	56000
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48880, Cypermethrin **Region 3**

Oso Flaco Creek

LOE ID:	56001
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for

	Cypermethrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48844**	**Region 3**
Oso Flaco Creek		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48844, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Oso Flaco Creek

LOE ID:	55855
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48845** **Region 3**

Oso Flaco Creek

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48845, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Oso Flaco Creek

LOE ID:	55856
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48846**	**Region 3**
Oso Flaco Creek		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48846, DDT (Dichlorodiphenyltrichloroethane) Region 3

Oso Flaco Creek

LOE ID:	55871
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48846, DDT (Dichlorodiphenyltrichloroethane) Region 3

Oso Flaco Creek

LOE ID:	55857
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48881	Region 3
Oso Flaco Creek		

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. The single sediment sample did not exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48881, Deltamethrin **Region 3**

Oso Flaco Creek

LOE ID:	55864
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48881, Deltamethrin **Region 3**

Oso Flaco Creek

LOE ID:	55858
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48885**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the

six samples exceed the evaluation guideline for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the six samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48885, Demeton **Region 3**

Oso Flaco Creek

LOE ID:	55866
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48885, Demeton **Region 3**

Oso Flaco Creek

LOE ID:	55865
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48885, Demeton **Region 3**

Oso Flaco Creek

LOE ID:	55867
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**41649**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the twelve samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of ten samples exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41649, Diazinon **Region 3**

Oso Flaco Creek

LOE ID:	55885
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41649, Diazinon **Region 3**

Oso Flaco Creek

LOE ID:	55878
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41649, Diazinon **Region 3**

Oso Flaco Creek

LOE ID:	55876
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41649, Diazinon **Region 3**

Oso Flaco Creek

LOE ID:	55877
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]

Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41649, Diazinon **Region 3**

Oso Flaco Creek

LOE ID:	55874
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41649, Diazinon **Region 3**

Oso Flaco Creek

LOE ID:	15268
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41649, Diazinon **Region 3**

Oso Flaco Creek

LOE ID:	48745
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48888**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guidelines for aquatic life uses and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guidelines and this does not exceed the allowable

	frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48888, Dichlorvos **Region 3**

Oso Flaco Creek

LOE ID:	55886
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48888, Dichlorvos **Region 3**

Oso Flaco Creek

LOE ID:	55887

Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48888, Dichlorvos **Region 3**

Oso Flaco Creek

LOE ID:	55891
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48888, Dichlorvos **Region 3**

Oso Flaco Creek

LOE ID:	55892
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48888, Dichlorvos **Region 3**

Oso Flaco Creek

LOE ID:	79300
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48888, Dichlorvos **Region 3**

Oso Flaco Creek

LOE ID:	79301
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48847** **Region 3**

Oso Flaco Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48847, Dieldrin **Region 3**

Oso Flaco Creek

LOE ID:	55893
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48889 Region 3

Oso Flaco Creek

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guidelines for aquatic life uses and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48889, Dimethoate Region 3

Oso Flaco Creek

LOE ID:	55907
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48889, Dimethoate **Region 3**

Oso Flaco Creek

LOE ID:	55902
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48889, Dimethoate **Region 3**

Oso Flaco Creek

LOE ID:	55901
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48889, Dimethoate **Region 3**

Oso Flaco Creek

LOE ID:	55900
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48889, Dimethoate **Region 3**

Oso Flaco Creek

LOE ID:	55903
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial

	use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48889, Dimethoate **Region 3**

Oso Flaco Creek

LOE ID:	55894
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48891** **Region 3**

Oso Flaco Creek

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48891, Disulfoton **Region 3**

Oso Flaco Creek

LOE ID:	55911
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48891, Disulfoton **Region 3**

Oso Flaco Creek

LOE ID:	55910
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48891, Disulfoton **Region 3**

Oso Flaco Creek

LOE ID:	55909
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48848** **Region 3**

Oso Flaco Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48848, Endrin **Region 3**

Oso Flaco Creek

LOE ID:	55917
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**47352**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Three of 8 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 8 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47352, Escherichia coli (E. coli)	**Region 3**
Oso Flaco Creek	

LOE ID:	51124
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**48882**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. The single sediment sample did not exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a

beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48882, Esfenvalerate/Fenvalerate **Region 3**

Oso Flaco Creek

LOE ID:	55919
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48882, Esfenvalerate/Fenvalerate **Region 3**

Oso Flaco Creek

LOE ID:	55918
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48893** **Region 3**

Oso Flaco Creek

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guideline for aquatic life uses . This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48893, Ethoprop **Region 3**

Oso Flaco Creek

LOE ID:	55928
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in

	a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48893, Ethoprop **Region 3**

Oso Flaco Creek

LOE ID:	55930
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48893, Ethoprop **Region 3**

Oso Flaco Creek

LOE ID:	55929
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48849** **Region 3**

Oso Flaco Creek

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48849, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Oso Flaco Creek

LOE ID:	55931
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48898**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life uses or the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48898, Methidathion — Region 3

Oso Flaco Creek

LOE ID:	55950
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48898, Methidathion — Region 3

Oso Flaco Creek

LOE ID:	55949
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48911**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the six water samples exceed the evaluation guidelines for drinking water and aquatic life uses. In addition, zero of the one sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48911, Methyl Parathion **Region 3**

Oso Flaco Creek

LOE ID:	55971
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48911, Methyl Parathion **Region 3**

Oso Flaco Creek

LOE ID:	55970

Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48911, Methyl Parathion **Region 3**

Oso Flaco Creek

LOE ID:	55962
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48911, Methyl Parathion **Region 3**

Oso Flaco Creek

LOE ID:	55961
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)

Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48911, Methyl Parathion **Region 3**

Oso Flaco Creek

LOE ID:	55960
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48911, Methyl Parathion **Region 3**

Oso Flaco Creek

LOE ID:	55959
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48911, Methyl Parathion **Region 3**

Oso Flaco Creek

LOE ID:	55951
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48840**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48840, Nitrogen, Nitrite **Region 3**

Oso Flaco Creek

LOE ID:	51086
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41663** **Region 3**

Oso Flaco Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. One of the 109 samples exceeded the water quality objectives for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 109 samples exceeded the water quality objectives for dissolved oxygen in Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	51160
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	51159
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	14325
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	13425
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	13426
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	48782
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	14326
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	13409
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	13408
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41663, Oxygen, Dissolved **Region 3**

Oso Flaco Creek

LOE ID:	48783
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 7 of 59 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48850** **Region 3**

Oso Flaco Creek

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for

pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48850, PCBs (Polychlorinated biphenyls) Region 3

Oso Flaco Creek

LOE ID:	55984
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48842** **Region 3**

Oso Flaco Creek

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48842, Parathion **Region 3**

Oso Flaco Creek

LOE ID:	55983
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48883**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection (and was not counted in this assessment because the result was reported as a 'non-detect' and the laboratory reporting limit is above the criteria). The single sediment sample did not exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though

this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48883, Permethrin, total **Region 3**

Oso Flaco Creek

LOE ID:	55989
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48883, Permethrin, total **Region 3**

Oso Flaco Creek

LOE ID:	55990
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48914** **Region 3**

Oso Flaco Creek

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guidelines for aquatic life uses and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48914, Phorate **Region 3**

Oso Flaco Creek

LOE ID:	55859
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight,

	2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48914, Phorate **Region 3**

Oso Flaco Creek

LOE ID:	55861
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48914, Phorate **Region 3**

Oso Flaco Creek

LOE ID:	56006

Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48914, Phorate **Region 3**

Oso Flaco Creek

LOE ID:	56005
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48914, Phorate **Region 3**

Oso Flaco Creek

LOE ID:	56004
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48914, Phorate **Region 3**

Oso Flaco Creek

LOE ID:	55860
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48915** **Region 3**

Oso Flaco Creek

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guidelines for aquatic life uses and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48915, Phosmet **Region 3**

Oso Flaco Creek

LOE ID:	55862
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48915, Phosmet **Region 3**

Oso Flaco Creek

LOE ID:	55868
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **41786** **Region 3**

Oso Flaco Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 84 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 84 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41786, Specific Conductivity **Region 3**

Oso Flaco Creek

LOE ID:	51069
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41786, Specific Conductivity **Region 3**

Oso Flaco Creek

LOE ID:	48744
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41786, Specific Conductivity **Region 3**

Oso Flaco Creek

LOE ID:	11865
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41786, Specific Conductivity **Region 3**

Oso Flaco Creek

LOE ID:	11845
Pollutant:	Electrical Conductivity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40948**	**Region 3**
Oso Flaco Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Five of the 108 samples exceed the water quality objective for Agriculture, two of the 108 samples exceed the water quality objective for Warm Freshwater Habitats, and ten of the 108 samples exceed the water quality objectives for Drinking Water and Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Five of the 108 samples exceed the water quality objective for Agriculture, two of the 108 samples exceed the water quality objective for Warm Freshwater Habitats, and ten of the 108 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	14339
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	14342
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	14341
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11863
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11862
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11861
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11584
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11583
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11582
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11586
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11585
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11864
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	14340
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH — Region 3

Oso Flaco Creek

LOE ID:	48579
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 2 of 59 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40948, pH — Region 3

Oso Flaco Creek

LOE ID:	48578
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	59
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 59 samples exceed the criterion for pH.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	48577
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 59 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	48785
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 8 of 59 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	48784
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 4 of 59 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	11846
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	14343
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	51125
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	51107
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	51087
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [

	312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	51161
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40948, pH **Region 3**

Oso Flaco Creek

LOE ID:	51127
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40947** **Region 3**

Oso Flaco Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Ninety-four of the 105 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ninety-four of the 105 samples exceed the Warm Freshwater Habitat evaluation guideline and this

exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 40947, Turbidity **Region 3**

Oso Flaco Creek

LOE ID:	51162
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 5 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 5/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40947, Turbidity **Region 3**

Oso Flaco Creek

LOE ID:	14357
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 23 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/21/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40947, Turbidity **Region 3**

Oso Flaco Creek

LOE ID:	13442
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40947, Turbidity **Region 3**

Oso Flaco Creek

LOE ID:	48580
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	54
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 54 of 62 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 3 monitoring sites [312OSR - Oso Flaco Creek at Highway 1, 312OFC-Oso Flaco Creek at Oso Flaco Lake Road, 312USC- Unnamed trib to Oso Flaco Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40947, Turbidity **Region 3**

Oso Flaco Creek

LOE ID:	13424
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 4/10/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41808** **Region 3**

Oso Flaco Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Seven lines of evidence are available in the administrative record to assess this pollutant. Two of five water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Zero of nine samples exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). Six sediment (pore water) samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. These results are not included in this decision. For the municipal and domestic supply beneficial use and the sediment sample, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of five samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2016.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41808, Chlorpyrifos **Region 3**

Oso Flaco Creek

LOE ID:	55986
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek. One sample was collected but is not included in this assessment because the result was "detected but not quantified" meaning that the parameter is measured but below the reporting limit and the laboratory reporting limit was above the guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy to be assessed as an exceedance of the criteria. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41808, Chlorpyrifos **Region 3**

Oso Flaco Creek

LOE ID:	55976
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41808, Chlorpyrifos **Region 3**

Oso Flaco Creek

LOE ID:	55977
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: None of the samples exceed the criterion for Chlorpyrifos. Six samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41808, Chlorpyrifos **Region 3**

Oso Flaco Creek

LOE ID:	55978
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41808, Chlorpyrifos **Region 3**

Oso Flaco Creek

LOE ID:	55979
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41808, Chlorpyrifos **Region 3**

Oso Flaco Creek

LOE ID:	48729
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41808, Chlorpyrifos **Region 3**

Oso Flaco Creek

LOE ID:	15267
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [312OFC-Oso Flaco Creek at Oso Flaco Lake Road]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48895**	**Region 3**
Oso Flaco Creek		

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Five of the six samples exceed the evaluation guideline for aquatic life uses but zero of the six samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating for the drinking water use. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating for the drinking water use is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the six samples exceed the evaluation guideline for aquatic life and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4.The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48895, Malathion **Region 3**

Oso Flaco Creek

LOE ID:	55939
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48895, Malathion **Region 3**

Oso Flaco Creek

LOE ID:	55948
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48895, Malathion **Region 3**

Oso Flaco Creek

LOE ID:	55940
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.

Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48895, Malathion **Region 3**

Oso Flaco Creek

LOE ID:	55941
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48895, Malathion **Region 3**

Oso Flaco Creek

LOE ID:	55938
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48895, Malathion **Region 3**

Oso Flaco Creek

LOE ID:	55937
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Oso Flaco Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Oso Flaco Creek was collected at 1 monitoring site [Oso Flaco Ck. at OFC Road - 312OFC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Maria River**
Water Body ID: **CAR3121003020011228103528**
Water Body Type: **River & Stream**

DECISION ID **32592** **Region 3**
Santa Maria River

Pollutant:	**Ammonia**
Final Listing Decision:	**Delist from 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eighteen lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Twelve LOEs summarize unionized ammonia data in which 12 of the 193 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Six LOEs summarize total ammonia data and zero of the 220 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List in the Water Quality Limited Segments category and because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 193 samples exceed the water quality objective for unionized ammonia and zero of the 220 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Nutrients TMDL was approved by USEPA on 03/08/2016.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	14472
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 42 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	14284
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	14473
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 42 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	9768
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	9801
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA and 312SMI-Santa Maria River at Highway 1].
Temporal Representation:	Data was collected over the time period 2/3/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	9800
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, and 312SMI-Santa Maria River at Highway 1].
Temporal Representation:	Data was collected over the time period 2/3/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	9847
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 61 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary].
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	9846
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 61 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary].
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	9845
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	49040
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 4/11/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	49041
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section

	II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 4/11/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	49039
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 46 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	51880
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	51881
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	51868
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	51867
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	52220
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32592, Ammonia **Region 3**

Santa Maria River

LOE ID:	52204
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38160**	**Region 3**
Santa Maria River		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One hundred twelve (112) of the 127 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred twelve of the 127 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38160, Chloride — Region 3

Santa Maria River

LOE ID:	9628
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	52
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 52 of 54 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38160, Chloride — Region 3

Santa Maria River

LOE ID:	9770
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	35
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 23 of 35 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38160, Chloride **Region 3**

Santa Maria River

LOE ID:	51835
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38160, Chloride **Region 3**

Santa Maria River

LOE ID:	51834
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 37 of 37 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38205** **Region 3**

Santa Maria River

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One hundred twenty-three (123) of the 127 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred twenty-three (123) of the 127 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38205, Sodium **Region 3**

Santa Maria River

LOE ID:	51878
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	37

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 37 of 37 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38205, Sodium **Region 3**

Santa Maria River

LOE ID:	51879
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sodium.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38205, Sodium **Region 3**

Santa Maria River

LOE ID:	9645
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	54
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 54 of 54 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38205, Sodium **Region 3**

Santa Maria River

LOE ID:	9799
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 32 of 35 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38823** **Region 3**

Santa Maria River

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. One hundred seventy (170) of the 191 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 165 of the 191 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred seventy (170) of the 191 samples exceed the evaluation guideline for Cold Freshwater Habitat and 165 of the 191 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	13392
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 11 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/12/2000-4/10/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	14294
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 28 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	14281
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 28 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	13467

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	13204
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	51
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 51 of 53 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	13205
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	51
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 51 of 53 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	48993
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 38 of 43 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	48992
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	43
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 43 of 43 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	13612
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	13391
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 11 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/12/2000-4/10/2001. Santa Maria watershed is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	51855
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	51854
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 34 of 36 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	52261
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38823, Turbidity **Region 3**

Santa Maria River

LOE ID:	52260
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 34 of 36 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 32721 Region 3

Santa Maria River

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Eleven of the twelve water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Zero of nine samples exceeded the USEPA drinking water health advisory. Five of five sediment samples exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007) and these samples also resulted in a toxic effect to test organisms. Four of four sediment samples (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.

For the municipal and domestic supply beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eleven of the twelve samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and five of five sediment samples exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007) and these samples also resulted in a toxic effect to test organisms. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	16173
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	16172

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	1952
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Unknown
Number of Samples:	2

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (September 2002 and May 2003). Water was toxic at both stations in September 2002 and May 2003. Analysis of chlorpyrifos in water showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC 50 for this pesticide for toxicity to Ceriodaphnia dubia (SWAMP, 2004). Toxicity Identification Evaluations of water samples from Orcutt Creek and the Santa Maria River showed toxicity to C. dubia was due to chlorpyrifos. At the station on the Santa Maria River, 2 of 2 samples were in exceedance of the aquatic life criteria.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CDFG Hazardous Assessment Criteria for Aquatic Life: 4-day average = 0.014 ppb, 1-hour day average = 0.025 ppb.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	1953
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003. Sediment was toxic at both stations in both samples. Analysis of chlorpyrifos in sediment porewater showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC50 for this pesticide to the amphipod Hyalella azteca (SWAMP, 2004). Toxicity Identification Evaluations of sediment samples from Orcutt

	Creek and the Santa Maria River showed toxicity was due to a combination of chlorpyrifos and other pesticides, likely pyrethroid pesticides (refer to attached excel spreadsheet file). Sediment bulk-phase chemical analyses showed elevated concentrations of chlorpyrifos.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 10/22/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	15075
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	15341
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	49055
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	49056
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58176
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Chlorpyrifos. Two additional samples (quantified as detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	80346
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	80347
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312SMA-Santa Maria River above Estuary and 312SMI-Santa Maria River at Highway 1.
Temporal Representation:	The samples were collected in April 2007 to 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	80345
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58181
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58180
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Chlorpyrifos. Two additional samples (quantified as detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58108
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 1/16/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58183
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 1/16/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58175
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58174
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58169
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58168
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58182
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58195
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312SMA-Santa Maria River above Estuary and 312SMI-

	Santa Maria River at Highway 1.
Temporal Representation:	The samples were collected in April 2007 to 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58190
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32721, Chlorpyrifos **Region 3**

Santa Maria River

LOE ID:	58194
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID	33393	Region 3
Santa Maria River		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) List under sections 4.1, 4.5 and 4.6 of the Listing Policy. Under sections 4.1 and 4.5 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Note, this decision has been revised to contain only data for total DDT and the DDT isomer. Data for the DDD and DDE isomers will be assessed in separate decisions with the specific pollutant name.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Two of the two tissue samples exceeded the evaluation guideline for the DDT isomer and protection of aquatic life uses. In addition, two of the five sediment samples exceeded the evaluation guideline for the DDT isomer used to protect for aquatic life uses (and wildlife uses) and each of these samples also resulted in a significant toxic effect to test organisms. However, zero of the three total DDT sediment samples exceed the evaluation guidelines used to protect for aquatic life uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the two tissue samples exceeded the evaluation guideline for the DDT isomer and protection of aquatic life uses. In addition, two of the five sediment samples exceeded the evaluation guideline for the DDT isomer used to protect for aquatic life uses (and wildlife uses) and each of these samples also resulted in a significant toxic effect to test organisms. Each of these exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL was approved by USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Santa Maria River

LOE ID:	58353
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	58351
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	58352
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Santa Maria River

LOE ID:	58484
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for

	DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	58486
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	58487
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	58186
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	58485
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	1948
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. Concentrations of DDT in sand crab tissues at the mouth of the Santa Maria River were higher than any other site measured in Region 3, and were as high as 556 ng/g dry wt in samples nearest the Santa Maria River estuary. Mean concentrations of total DDT in sand crabs from the Santa Maria River area were 350 ng/g (dry wt). Results of a gradient study of tissues loads in sand crabs collected north and south of the river mouth confirmed that the Santa Maria River was the source of DDT in sand crab tissues. These results are consistent with previous BPTCP studies that found DDT in sediments from the Santa Maria River estuary were among the highest measured in the state (Total DDT = 679.5 µg/kg dry wt., Downing et al. 1998 Section VII). High total DDT in the sediment sample from this station corresponded with high sediment toxicity to amphipods (amphipod Eohaustorius estuarius mortality = 98%; Downing et al. 1998, Section II).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth of the Santa Maria River: 150S, 300S, 450S, and 600S (river).
Temporal Representation:	Samples were collected during May and August 2000 and February 2001.
Environmental Conditions:	This study considers the Santa Maria River watershed an area of agricultural land use and an area of oil production.
QAPP Information:	QA/QC procedures for this study followed SWAMP chemical analysis procedures. The chemistry lab used in this study is the same lab conducting organic chemical analyses for SWAMP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	1951
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Two out of 2 samples exceeded (TSMP, 2002). A total of 2 whole fish composite samples of starry flounder and threespine stickleback were collected. The flounder sample was collected in 1992 and the stickleback in 1999. The guideline was exceeded in both samples.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast RWQCB Basin Plan: No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	1000 ng/g - NAS Guideline (whole fish).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station located just above the beach area at the mouth of the river.
Temporal Representation:	Samples were collected in 1992 and 1999.
Environmental Conditions:	
QAPP Information:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	1950
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003. Both measurements for total DDTs and 4,4'-DDT were below freshwater acute criteria, however both measurements exceeded human health criteria for water consumption for both 4,4'-DDT and DDTs (total) (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Freshwater acute = 1.1 ppb for 4,4'-DDT and DDTs (total). Human Health (water consumption) = 0.00059 ppb for 4,4'-DDT. Human Health (water consumption) = 0.0059 ppb for DDTs (total).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33393, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River

LOE ID:	1949
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (June 2002 and May 2003). Sediment was toxic at both stations in both samples (SWAMP, 2004). Sediment bulk-phase chemical analyses showed elevated concentrations of DDTs. In the Santa Maria River sample, the sediment criterion for DDT (sum) was exceeded (62.9 ppb) in 2002, but not in 2003. The DDTs (total) criterion (572 ppb) was not exceeded on either occasion.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria (Policy): DDT(sum) = 62.9 ppb DDTs(total) = 572
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 6/28/2002 and 10/22/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID	**32806**	**Region 3**
Santa Maria River		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081

Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) List under sections 4.1, 4.5 and 4.6 of the Listing Policy. Under sections 4.1 and 4.5 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the tissue samples exceeded the evaluation guideline for Dieldrin and protection of aquatic life uses. Zero of the four sediment samples exceeded the evaluation guideline for the Dieldrin used to protect for aquatic life uses (and wildlife uses). However, two of the two water samples exceed the evaluation guidelines used to protect for aquatic life uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the two water samples exceed the evaluation guidelines used to protect for aquatic life uses and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The Santa Maria River Watershed Toxicity and Pesticide TMDL was approved by USEPA on August 31, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32806, Dieldrin **Region 3**

Santa Maria River

LOE ID:	1961
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. Samples were all below the numeric criterion.

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	NAS Tissue guideline = 100 ppb (NAS, 1972).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth of the Santa Maria River: 150S, 300S, 450S, and 600S (river).
Temporal Representation:	Samples were collected during May and August 2000 and February 2001.
Environmental Conditions:	This study considers the Santa Maria River watershed an area of agricultural land use and an area of oil production.
QAPP Information:	QA/QC procedures for this study followed SWAMP chemical analysis procedures. The chemistry lab used in this study is the same lab conducting organic chemical analyses for SWAMP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32806, Dieldrin **Region 3**

Santa Maria River

LOE ID:	1963
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled in the Santa Maria River (SMA) in October 2003 and the dieldrin level was below the detection limit (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

	Freshwater Sediment criterion: max Dieldrin = 6.18 ppm
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	One sample was collected on 10/22/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32806, Dieldrin **Region 3**

Santa Maria River

LOE ID:	16696
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32806, Dieldrin **Region 3**

Santa Maria River

LOE ID:	1962
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected on the Lower Santa Maria River in September 2002 and May 2003 (SWAMP, 2004). Two of 2 samples were in exceedance of the criterion for water consumption, however both samples were below the freshwater acute criterion (0.24 ppb).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR Human Health Criterion for consumption of Water & Organisms = 0.00014 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32806, Dieldrin **Region 3**

Santa Maria River

LOE ID:	16697
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32806, Dieldrin **Region 3**

Santa Maria River

LOE ID:	58380
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32806, Dieldrin **Region 3**

Santa Maria River

LOE ID:	58369
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32806, Dieldrin **Region 3**

Santa Maria River

LOE ID:	58368
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32806, Dieldrin **Region 3**

Santa Maria River

LOE ID:	58370
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **33137** **Region 3**

Santa Maria River

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Six LOEs describe sediment samples, while one LOE describes a tissue sample. Zero out of the three sediment samples did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Two out of two tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. For the aquatic habitat beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of two tissue samples exceed the evaluation guideline set to protect for the commercial beneficial use and this exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 33137, Endrin **Region 3**

Santa Maria River

LOE ID:	58433
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33137, Endrin **Region 3**

Santa Maria River

LOE ID:	58431
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33137, Endrin **Region 3**

Santa Maria River

LOE ID:	58447

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33137, Endrin **Region 3**

Santa Maria River

LOE ID:	58432
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33137, Endrin **Region 3**

Santa Maria River

LOE ID:	1973
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Two out of 2 samples exceeded (TSMP, 2002). A total of 2 whole fish composite samples of starry flounder and threespine stickleback and were collected. The flounder was collected in 1992 and the stickleback in 1999. The guideline was exceeded in both samples.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast RWQCB Basin Plan: No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	100 ng/g NAS guideline (whole fish) (NAS, 1972).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station located just above the beach area at the mouth of the river.
Temporal Representation:	Samples were collected in 1992 and 1999.
Environmental Conditions:	
QAPP Information:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33137, Endrin — Region 3

Santa Maria River

LOE ID:	16499
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33137, Endrin — Region 3

Santa Maria River

LOE ID:	16500
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38501** **Region 3**

Santa Maria River

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Fifty-three of 64 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 25 samples

exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-three of 64 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38501, Escherichia coli (E. coli) **Region 3**

Santa Maria River

LOE ID:	11377
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]

Temporal Representation:	Data was collected over the time period 1/4/2005-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38501, Escherichia coli (E. coli) **Region 3**

Santa Maria River

LOE ID:	11376
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	21
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 21 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2005-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38501, Escherichia coli (E. coli) **Region 3**

Santa Maria River

LOE ID:	51897
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	31
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 31 of 38 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38501, Escherichia coli (E. coli) **Region 3**

Santa Maria River

LOE ID:	51898
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **32755** **Region 3**

Santa Maria River

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Ninety-six of 132 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 15 of 132 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ninety-six of 132 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32755, Fecal Coliform **Region 3**

Santa Maria River

LOE ID:	51887
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	33
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 33 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32755, Fecal Coliform **Region 3**

Santa Maria River

LOE ID:	51896
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32755, Fecal Coliform **Region 3**

Santa Maria River

LOE ID:	52200
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 8 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32755, Fecal Coliform **Region 3**

Santa Maria River

LOE ID:	52201
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32755, Fecal Coliform **Region 3**

Santa Maria River

LOE ID:	11465
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32755, Fecal Coliform **Region 3**

Santa Maria River

LOE ID:	11464
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	19

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 19 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32755, Fecal Coliform **Region 3**

Santa Maria River

LOE ID:	11341
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	61
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 5 of 61 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a

	minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32755, Fecal Coliform **Region 3**

Santa Maria River

LOE ID:	11340
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	44
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 44 of 61 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	32526	Region 3
Santa Maria River		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Thirty-four lines of evidence are available in the administrative record to assess this pollutant. Forty-eight of the 159 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. One hundred fifty-two of the 159 nitrate samples and 105 of the 112 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. One hundred fifty-three of the 159 nitrate samples and 83 of the 83 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 0.5 mg/L to 22 mg/L, frequently exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the Warm Freshwater Habitat water quality objective of 5.0 mg/L . In addition, this waterbody frequently exceeded the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Visual observations of floating algal mats ranged up to 100% cover, frequently exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration ranged up to 210 ug/L, very frequently exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 3.33 mg/L to 3.58 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 68 g/m2 ash-free dry weight (AFDW) to 81 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and at times the warm water screening threshold of 80 grams/m2 (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 171 mg/m2 to 204 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and at times the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-eight of the 159 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. One hundred fifty-two of the 159 nitrate samples and 105 of the 112 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. One hundred fifty-three of the 159 nitrate samples and 83 of the 83 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment. 5. The Santa Maria Watershed Nutrients TMDL has been approved by USEPA on 03/08/2016. 6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the Section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	28111
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth). Twelve of the 13 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	9644
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	61
Number of Exceedances:	61
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 61 of 61 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	9798
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 30 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	9785
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 8 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	9631
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	61
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 17 of 61 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	14241
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	29
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 28 of 29 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	28125
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	61
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Coastal Confluences). All 61 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary].
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	28124
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (SantaMaria). Thirty of the 35 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Monitoring in Santa Maria Watershed Rotation Area was conducted in 2000.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	28123
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (SantaMaria). Thirty of the 35 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Monitoring in Santa Maria Watershed Rotation Area was conducted in 2000.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	48951
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	45
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 45 of 45 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	48950
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	45
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 39 of 45 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	48949
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	45
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 45 of 45 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	48933
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	48932
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	48794
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	48931
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	28126
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	61
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Coastal Confluences). All 61 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary].
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	28110
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth). Twelve of the 13 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	14270
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	14354

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 11 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	52223
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 37 of 37 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	51849
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 7 of 37 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	51850
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	51871
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	37
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 37 of 37 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	52238
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	52239
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 37 of 37 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	52240
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	51882
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	51883
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	37
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 37 of 37 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	51838
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	51837
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 37 of 37 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate **Region 3**

Santa Maria River

LOE ID:	51884
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate — Region 3

Santa Maria River

LOE ID:	51895
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32526, Nitrate — Region 3

Santa Maria River

LOE ID:	51894
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 37 of 37 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**39330**	**Region 3**
Santa Maria River		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of

Conclusion:

the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twenty-four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Twelve LOEs summarize sediment samples. Six sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and seven additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, thirteen total samples are available to assess toxic effects in sediment samples. Ten of the thirteen sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Twelve LOEs summarize water samples. Thirteen water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twenty water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, thirty-three total samples are available to assess toxic effects in water samples. Twenty-six of the thirty-three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 13 sediment samples and 26 of the 33 samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL was approved by USEPA on August 31, 2015.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	58190
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella

	azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	58195
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312SMA-Santa Maria River above Estuary and 312SMI-Santa Maria River at Highway 1.
Temporal Representation:	The samples were collected in April 2007 to 2009.
Environmental Conditions:	

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	58189
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Fourteen samples were collected to evaluate water toxicity. Thirteen of the 14 samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia (11 samples), Hyalella Azteca (1 sample), Cyprinodon variegatus (1 sample) and growth of Selenastrum capricornutum (3 samples).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312SMA-Santa Maria River above Estuary and 312SMI-Santa Maria River at Highway 1.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	58194
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	58188
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. Six of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in six samples 10/21/2008, 12/3/2008, 02/3/2009, 3/31/2009, 6/10/2009 and 8/26/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory.Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	80345
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	80348
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. Six of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in six samples 10/21/2008, 12/3/2008, 02/3/2009, 3/31/2009, 6/10/2009 and 8/26/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory.Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	80346
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella

	azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	80347
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	

Spatial Representation:	The samples were collected at 312SMA-Santa Maria River above Estuary and 312SMI-Santa Maria River at Highway 1.
Temporal Representation:	The samples were collected in April 2007 to 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	80344
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Fourteen samples were collected to evaluate water toxicity. Thirteen of the 14 samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia (11 samples), Hyalella Azteca (1 sample), Cyprinodon variegatus (1 sample) and growth of Selenastrum capricornutum (3 samples).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312SMA-Santa Maria River above Estuary and 312SMI-Santa Maria River at Highway 1.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24364
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]. Five of the 6 toxic samples were from the lower site, 312SMA.
Temporal Representation:	Data was collected over the time period 3/22/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24322
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/19/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24321
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/19/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24311
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in

	the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 9/27/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24313
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 5/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	23990
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24338
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24339
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

	December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24312
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 9/27/2005. Cooperative Monitoring Program (CMP) staff

	conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24371
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]. Five of the 6 toxic samples were collected at the lower sites, 312SMA.
Temporal Representation:	Data was collected over the time period 3/22/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24331
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24320
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 5/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	23974
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39330, Toxicity **Region 3**

Santa Maria River

LOE ID:	24340
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SM1 - Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37581**	**Region 3**
Santa Maria River		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to

result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of the two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37581, Anthracene **Region 3**

Santa Maria River

LOE ID:	15749
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37581, Anthracene **Region 3**

Santa Maria River

LOE ID:	15750
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37581, Anthracene **Region 3**

Santa Maria River

LOE ID:	58128
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37581, Anthracene **Region 3**

Santa Maria River

LOE ID:	58129
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37395**	**Region 3**
Santa Maria River		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of the two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37395, Arsenic **Region 3**

Santa Maria River

LOE ID:	58130
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37395, Arsenic **Region 3**

Santa Maria River

LOE ID:	58131
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37395, Arsenic **Region 3**

Santa Maria River

LOE ID:	14817
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37395, Arsenic **Region 3**

Santa Maria River

LOE ID:	14816
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	51230	Region 3
Santa Maria River		

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the Evaluation Guideline applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51230, Azinphos-methyl (Guthion)	**Region 3**
Santa Maria River	

LOE ID:	58135
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51230, Azinphos-methyl (Guthion) **Region 3**

Santa Maria River

LOE ID:	58136
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).

Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 37713 Region 3

Santa Maria River

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of the two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37713, Benzo(a)anthracene Region 3

Santa Maria River

LOE ID:	58138
Pollutant:	Benzo(a)anthracene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37713, Benzo(a)anthracene **Region 3**

Santa Maria River

LOE ID:	58137
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37713, Benzo(a)anthracene **Region 3**

Santa Maria River

LOE ID:	15682
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37713, Benzo(a)anthracene **Region 3**

Santa Maria River

LOE ID:	15681
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37508** **Region 3**

Santa Maria River

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of the two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37508, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Santa Maria River

LOE ID:	15515
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37508, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Santa Maria River

LOE ID:	15502
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37508, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Santa Maria River

LOE ID:	58139
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37508, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Santa Maria River

LOE ID:	58143
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51236** **Region 3**

Santa Maria River

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of three sediment samples exceeded the aquatic life evaluation guideline. The single water sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of the three sediment samples exceeded the evaluation guideline and the single water sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51236, Bifenthrin **Region 3**

Santa Maria River

LOE ID:	58144
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51236, Bifenthrin **Region 3**

Santa Maria River

LOE ID:	58145
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51236, Bifenthrin **Region 3**

Santa Maria River

LOE ID:	58146
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51236, Bifenthrin **Region 3**

Santa Maria River

LOE ID:	58152
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51236, Bifenthrin **Region 3**

Santa Maria River

LOE ID:	58150
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51236, Bifenthrin **Region 3**

Santa Maria River

LOE ID:	58151
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **38328** **Region 3**

Santa Maria River

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero out of 127 water samples exceeded the evaluation guideline applied to protect for the agricultural supply beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of 127 water samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38328, Boron **Region 3**

Santa Maria River

LOE ID:	51905
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38328, Boron **Region 3**

Santa Maria River

LOE ID:	51833
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38328, Boron **Region 3**

Santa Maria River

LOE ID:	9769
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38328, Boron **Region 3**

Santa Maria River

LOE ID:	9814
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Boron.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/12/2000-6/26/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38328, Boron **Region 3**

Santa Maria River

LOE ID:	9848
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37891**	**Region 3**
Santa Maria River		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of the two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37891, Cadmium **Region 3**

Santa Maria River

LOE ID:	15363
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37891, Cadmium **Region 3**

Santa Maria River

LOE ID:	15364
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37891, Cadmium **Region 3**

Santa Maria River

LOE ID:	58153
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37891, Cadmium **Region 3**

Santa Maria River

LOE ID:	58154
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51240 Region 3

Santa Maria River

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of three sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51240, Chlordane — Region 3

Santa Maria River

LOE ID:	58162
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51240, Chlordane **Region 3**

Santa Maria River

LOE ID:	58161
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

	ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51240, Chlordane **Region 3**

Santa Maria River

LOE ID:	58160
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51240, Chlordane **Region 3**

Santa Maria River

LOE ID:	58159

Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **39478** **Region 3**

Santa Maria River

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six of the 210 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 210 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	52222
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	52221
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	51893
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	51892
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	9783
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 33 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	14474
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	9784
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 33 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	14475
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	49042
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 42 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	49054
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 42 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	9629
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39478, Chlorophyll-a **Region 3**

Santa Maria River

LOE ID:	9630
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	37950	Region 3
Santa Maria River		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of the two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37950, Chromium	**Region 3**
Santa Maria River	

LOE ID:	16057
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37950, Chromium **Region 3**

Santa Maria River

LOE ID:	16058
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37950, Chromium **Region 3**

Santa Maria River

LOE ID:	58110
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37950, Chromium **Region 3**

Santa Maria River

LOE ID:	58109
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37951**	**Region 3**
Santa Maria River		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of the two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37951, Chrysene (C1-C4) **Region 3**

Santa Maria River

LOE ID:	58112
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37951, Chrysene (C1-C4) **Region 3**

Santa Maria River

LOE ID:	58111
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37951, Chrysene (C1-C4) **Region 3**

Santa Maria River

LOE ID:	15890
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37951, Chrysene (C1-C4) **Region 3**

Santa Maria River

LOE ID:	15891
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37878**	**Region 3**
Santa Maria River		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of the two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37878, Copper **Region 3**

Santa Maria River

LOE ID:	15927
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37878, Copper **Region 3**

Santa Maria River

LOE ID:	15972
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37878, Copper **Region 3**

Santa Maria River

LOE ID:	58114
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for

	sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37878, Copper **Region 3**

Santa Maria River

LOE ID:	58113
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51248** **Region 3**

Santa Maria River

Pollutant: **Cyfluthrin**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of three sediment samples exceeded the aquatic life evaluation guideline. The single water sample result was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of the three sediment samples exceeded the evaluation guideline and zero out of zero water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51248, Cyfluthrin **Region 3**

Santa Maria River

LOE ID:	58115
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for

	Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51248, Cyfluthrin **Region 3**

Santa Maria River

LOE ID:	58120
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51248, Cyfluthrin **Region 3**

Santa Maria River

LOE ID:	58118
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51248, Cyfluthrin **Region 3**

Santa Maria River

LOE ID:	58117
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51248, Cyfluthrin **Region 3**

Santa Maria River

LOE ID:	58116
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine

	beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51248, Cyfluthrin **Region 3**

Santa Maria River

LOE ID:	58119
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51251**	**Region 3**
Santa Maria River		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. One of three sediment samples exceeded the aquatic life evaluation guideline. The single water sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One out of the three sediment samples exceeded the evaluation guideline and the single water exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51251, Cyhalothrin, Lambda — Region 3

Santa Maria River

LOE ID:	58124
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51251, Cyhalothrin, Lambda — Region 3

Santa Maria River

LOE ID:	58121
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51251, Cyhalothrin, Lambda **Region 3**

Santa Maria River

LOE ID:	58122
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51251, Cyhalothrin, Lambda **Region 3**

Santa Maria River

LOE ID:	58123
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51251, Cyhalothrin, Lambda **Region 3**

Santa Maria River

LOE ID:	58426
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51251, Cyhalothrin, Lambda **Region 3**

Santa Maria River

LOE ID:	58427
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51289**	**Region 3**
Santa Maria River		

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of three sediment samples exceeded the aquatic life evaluation guideline. The single water sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of the three sediment samples exceeded the evaluation guideline and the single water sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51289, Deltamethrin **Region 3**

Santa Maria River

LOE ID:	58496
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51289, Deltamethrin **Region 3**

Santa Maria River

LOE ID:	58499
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51289, Deltamethrin **Region 3**

Santa Maria River

LOE ID:	58498
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51289, Deltamethrin **Region 3**

Santa Maria River

LOE ID:	58497
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51289, Deltamethrin **Region 3**

Santa Maria River

LOE ID:	58511
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51289, Deltamethrin **Region 3**

Santa Maria River

LOE ID:	58512
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51290 **Region 3**

Santa Maria River

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of seven water samples exceeded the Evaluation Guideline applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of seven water samples exceeded the Evaluation Guideline applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51290, Demeton **Region 3**

Santa Maria River

LOE ID:	58514
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51290, Demeton **Region 3**

Santa Maria River

LOE ID:	58513
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51290, Demeton **Region 3**

Santa Maria River

LOE ID:	58526
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51290, Demeton **Region 3**

Santa Maria River

LOE ID:	58527

Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51290, Demeton **Region 3**

Santa Maria River

LOE ID:	58524
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51290, Demeton **Region 3**

Santa Maria River

LOE ID:	58525
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 51292 **Region 3**

Santa Maria River

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Zero out of seven water samples exceeded the Evaluation Guideline applied to protect for aquatic life beneficial uses. Zero out of three water samples exceeded the Evaluation Guideline applied to protect for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of seven water samples exceeded the Evaluation Guideline applied to protect for aquatic life beneficial uses and zero out of three water samples exceeded the Evaluation Guideline applied to protect for the municipal beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51292, Dichlorvos **Region 3**

Santa Maria River

LOE ID:	58569
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51292, Dichlorvos **Region 3**

Santa Maria River

LOE ID:	58570
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

	Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51292, Dichlorvos **Region 3**

Santa Maria River

LOE ID:	58581
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51292, Dichlorvos — Region 3

Santa Maria River

LOE ID:	58580
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51292, Dichlorvos — Region 3

Santa Maria River

LOE ID:	58579
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51292, Dichlorvos **Region 3**

Santa Maria River

LOE ID:	58571
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51292, Dichlorvos **Region 3**

Santa Maria River

LOE ID:	58367
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**51853**	**Region 3**
Santa Maria River		

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero out of seven water samples exceeded the evaluation guideline for the aquatic life beneficial use. One out of seven water samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of seven water samples exceeded the evaluation guideline applied to protect for the aquatic life beneficial use and one out of seven water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51853, Dimethoate **Region 3**

Santa Maria River

LOE ID:	58396
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51853, Dimethoate **Region 3**

Santa Maria River

LOE ID:	58397

Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51853, Dimethoate **Region 3**

Santa Maria River

LOE ID:	58381
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51853, Dimethoate **Region 3**

Santa Maria River

LOE ID:	58382
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51853, Dimethoate **Region 3**

Santa Maria River

LOE ID:	58383
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51853, Dimethoate **Region 3**

Santa Maria River

LOE ID:	58410
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51853, Dimethoate **Region 3**

Santa Maria River

LOE ID:	58398
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51853, Dimethoate **Region 3**

Santa Maria River

LOE ID:	58395
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51853, Dimethoate **Region 3**

Santa Maria River

LOE ID:	58411
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**51869**	**Region 3**
Santa Maria River		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of seven water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of seven water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51869, Disulfoton **Region 3**

Santa Maria River

LOE ID:	58414
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51869, Disulfoton **Region 3**

Santa Maria River

LOE ID:	58415
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51869, Disulfoton **Region 3**

Santa Maria River

LOE ID:	58430
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51597**	**Region 3**
Santa Maria River		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Eight lines of evidence are available in the administrative record to assess this pollutant. Four LOEs summarize water samples. The single water sample (representing both Esfenvalerate - LOEs 58464 & 58465, and Fenvalerate - LOEs 58450 & 58463) did not exceed the evaluation guideline for aquatic life protection. Four LOEs summarize sediment samples. Zero of the three sediment samples exceeded the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample and three sediment samples did not exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51597, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River

LOE ID:	58448
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51597, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River

LOE ID:	58449
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51597, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River

LOE ID:	58450
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51597, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River

LOE ID:	58466
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51597, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River

LOE ID:	58475
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51597, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River

LOE ID:	58465
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51597, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River

LOE ID:	58464
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51597, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River

LOE ID:	58463
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51892	Region 3
Santa Maria River		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of seven water samples exceeded the evaluation guideline applied to protect for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of seven water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51892, Ethoprop	**Region 3**
Santa Maria River	

LOE ID:	58478
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51892, Ethoprop **Region 3**

Santa Maria River

LOE ID:	58476
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51892, Ethoprop **Region 3**

Santa Maria River

LOE ID:	58490
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51892, Ethoprop **Region 3**

Santa Maria River

LOE ID:	58477
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51892, Ethoprop **Region 3**

Santa Maria River

LOE ID:	58489
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51892, Ethoprop **Region 3**

Santa Maria River

LOE ID:	58488
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**51598**	**Region 3**
Santa Maria River		

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51598, Fenpropathrin **Region 3**

Santa Maria River

LOE ID:	58500
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51598, Fenpropathrin **Region 3**

Santa Maria River

LOE ID:	58501
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37639** **Region 3**

Santa Maria River

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the

Conclusion:	Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37639, Fluoranthene **Region 3**

Santa Maria River

LOE ID:	58502
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for

	Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37639, Fluoranthene **Region 3**

Santa Maria River

LOE ID:	58503
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37639, Fluoranthene **Region 3**

Santa Maria River

LOE ID:	16584

Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37639, Fluoranthene **Region 3**

Santa Maria River

LOE ID:	16597
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38196**	**Region 3**
Santa Maria River		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 38196, Fluorene **Region 3**

Santa Maria River

LOE ID:	16463
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38196, Fluorene **Region 3**

Santa Maria River

LOE ID:	16462
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38196, Fluorene **Region 3**

Santa Maria River

LOE ID:	58504
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38196, Fluorene **Region 3**

Santa Maria River

LOE ID:	58515
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	38256	Region 3
Santa Maria River		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38256, Lead	**Region 3**
Santa Maria River	

LOE ID:	17296
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38256, Lead **Region 3**

Santa Maria River

LOE ID:	17297
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead

	is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38256, Lead **Region 3**

Santa Maria River

LOE ID:	58516
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38256, Lead **Region 3**

Santa Maria River

LOE ID:	58517
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51993**	**Region 3**
Santa Maria River		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51993, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Maria River

LOE ID:	58530
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]

Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51993, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Maria River

LOE ID:	58519
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51993, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Maria River

LOE ID:	58518
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51993, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Maria River

LOE ID:	58529
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38148** **Region 3**

Santa Maria River

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38148, Mercury **Region 3**

Santa Maria River

LOE ID:	17378
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38148, Mercury **Region 3**

Santa Maria River

LOE ID:	17379
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38148, Mercury **Region 3**

Santa Maria River

LOE ID:	58572
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and

	Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38148, Mercury **Region 3**

Santa Maria River

LOE ID:	58563
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	52020	Region 3
Santa Maria River		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. The single water sample did not exceed the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52020, Methidathion	Region 3
Santa Maria River	

LOE ID:	58574
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52020, Methidathion **Region 3**

Santa Maria River

LOE ID:	58575
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52020, Methidathion **Region 3**

Santa Maria River

LOE ID:	58573
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	52051	Region 3
Santa Maria River		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Thirteen lines of evidence are available in the administrative record to assess this pollutant. Zero out of seven water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of seven water samples exceeded the evaluation guideline for the municipal beneficial use. Zero out of three sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of seven water and zero out of three sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion	**Region 3**
Santa Maria River	

LOE ID:	58585
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58582
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58583
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58584
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58435
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58358
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from

	drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58436
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58360
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58359
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58451
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa

	Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58361
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58434
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52051, Methyl Parathion **Region 3**

Santa Maria River

LOE ID:	58437
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38137** **Region 3**

Santa Maria River

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38137, Naphthalene **Region 3**

Santa Maria River

LOE ID:	58453
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38137, Naphthalene **Region 3**

Santa Maria River

LOE ID:	58452

Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38137, Naphthalene **Region 3**

Santa Maria River

LOE ID:	17212
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38137, Naphthalene **Region 3**

Santa Maria River

LOE ID:	17211
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38153** **Region 3**

Santa Maria River

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38153, Nickel **Region 3**

Santa Maria River

LOE ID:	17017
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38153, Nickel **Region 3**

Santa Maria River

LOE ID:	17016
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38153, Nickel **Region 3**

Santa Maria River

LOE ID:	58226
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 38153, Nickel **Region 3**

Santa Maria River

LOE ID:	58227
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53040** **Region 3**

Santa Maria River

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 38

samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 38 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53040, Nitrogen, Nitrite **Region 3**

Santa Maria River

LOE ID:	51865
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53040, Nitrogen, Nitrite **Region 3**

Santa Maria River

LOE ID:	51864
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38255** **Region 3**

Santa Maria River

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-six lines of evidence are available in the administrative record to assess this pollutant. Six of the 222 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 222 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 222 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 222 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	52257
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 6 of 37 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [

	312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	52242
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	52241
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	51841
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 6 of 37 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	51840
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	51839

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	14247
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	14248
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 6 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	14249
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 6 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	48970

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 4 of 42 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	48969
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 4 of 42 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	48953
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	48952
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 42 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13592
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13360
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]

Temporal Representation:	Data was collected over the time period 1/17/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13359
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13202
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 9 of 61 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13373
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 32

	samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13374
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13608
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13609
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	14246
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver

	Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13610
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13469
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 61 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13470
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38255, Oxygen, Dissolved **Region 3**

Santa Maria River

LOE ID:	13471
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	Santa Maria River to determine beneficial use support and results are as follows: 9 of 61 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**32722**	**Region 3**
Santa Maria River		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. Sand crab tissue samples were taken in 2000, but samples counts were not available. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32722, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Santa Maria River

LOE ID:	1954
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. The highest concentrations of total PAHs in sand crabs were found in the vicinity of the Santa Maria River (Guadalupe and Santa Maria River) where values for individual samples collected in August ranged from 310 to 2117 ng/g dry weight and 2167 to 14419 ng/g lipid weight. Mean concentrations of total PAHs in samples from the Santa Maria River site located south of the river exceeded 940 ng/g dry weight and 6500 ng/g lipid weight.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth of the Santa Maria River: 150S, 300S, 450S, and 600S (river).

Temporal Representation:	Samples were collected during May and August 2000 and February 2001.
Environmental Conditions:	This study considers the Santa Maria River watershed an area of agricultural land use and an area of oil production.
QAPP Information:	QA/QC procedures for this study followed SWAMP chemical analysis procedures. The chemistry lab used in this study is the same lab conducting organic chemical analyses for SWAMP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32722, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Santa Maria River

LOE ID:	58254
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32722, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Santa Maria River

LOE ID:	58253
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**52095**	**Region 3**
Santa Maria River		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52095, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Maria River

LOE ID:	58257
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52095, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Maria River

LOE ID:	80835
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 3312SMAxxx (Santa Maria River above Estuary).
Temporal Representation:	The samples were collected on 6/11/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52095, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Maria River

LOE ID:	58269
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 3312SMAxxx (Santa Maria River above Estuary).
Temporal Representation:	The samples were collected on 6/11/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52095, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Maria River

LOE ID:	58268
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52088** **Region 3**

Santa Maria River

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52088, Parathion **Region 3**

Santa Maria River

LOE ID:	58256
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52088, Parathion **Region 3**

Santa Maria River

LOE ID:	58255
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51599 Region 3

Santa Maria River

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero water samples exceeded the evaluation guideline for the aquatic life beneficial uses. The single sample result was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of three sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51599, Permethrin, total Region 3

Santa Maria River

LOE ID:	58272
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51599, Permethrin, total **Region 3**

Santa Maria River

LOE ID:	58282
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51599, Permethrin, total **Region 3**

Santa Maria River

LOE ID:	58281
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used.

	Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51599, Permethrin, total **Region 3**

Santa Maria River

LOE ID:	58280
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51599, Permethrin, total **Region 3**

Santa Maria River

LOE ID:	58271
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51599, Permethrin, total **Region 3**

Santa Maria River

LOE ID:	58270
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine

	beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**38168**	**Region 3**
Santa Maria River		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38168, Phenanthrene **Region 3**

Santa Maria River

LOE ID:	58296
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38168, Phenanthrene **Region 3**

Santa Maria River

LOE ID:	58305

Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38168, Phenanthrene **Region 3**

Santa Maria River

LOE ID:	17116
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38168, Phenanthrene **Region 3**

Santa Maria River

LOE ID:	17115
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52149 Region 3

Santa Maria River

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero out of seven water samples exceeded the evaluation guideline for the aquatic life beneficial use and the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of seven water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52149, Phorate Region 3

Santa Maria River

LOE ID:	58320
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52149, Phorate **Region 3**

Santa Maria River

LOE ID:	58307
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52149, Phorate **Region 3**

Santa Maria River

LOE ID:	58329
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52149, Phorate **Region 3**

Santa Maria River

LOE ID:	58308
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52149, Phorate **Region 3**

Santa Maria River

LOE ID:	58330
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52149, Phorate **Region 3**

Santa Maria River

LOE ID:	58319
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52149, Phorate **Region 3**

Santa Maria River

LOE ID:	58318
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52149, Phorate **Region 3**

Santa Maria River

LOE ID:	58321
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52149, Phorate **Region 3**

Santa Maria River

LOE ID:	58306
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52166**	**Region 3**
Santa Maria River		

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for the aquatic life beneficial use. The single water sample did not exceed the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52166, Phosmet **Region 3**

Santa Maria River

LOE ID:	58332
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52166, Phosmet **Region 3**

Santa Maria River

LOE ID:	58331
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52166, Phosmet **Region 3**

Santa Maria River

LOE ID:	58340
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking

	water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 38339 Region 3

Santa Maria River

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38339, Pyrene Region 3

Santa Maria River

LOE ID:	58341
Pollutant:	Pyrene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38339, Pyrene **Region 3**

Santa Maria River

LOE ID:	58342
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life

	(Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38339, Pyrene **Region 3**

Santa Maria River

LOE ID:	16948
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38339, Pyrene **Region 3**

Santa Maria River

LOE ID:	16949
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38435** **Region 3**

Santa Maria River

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Seven lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 175 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of the 175 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38435, Specific Conductivity **Region 3**

Santa Maria River

LOE ID:	49057
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 42 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38435, Specific Conductivity **Region 3**

Santa Maria River

LOE ID:	11499
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38435, Specific Conductivity — Region 3

Santa Maria River

LOE ID:	11318
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38435, Specific Conductivity — Region 3

Santa Maria River

LOE ID:	11342
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	61
Number of Exceedances:	9

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 9 of 61 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38435, Specific Conductivity **Region 3**

Santa Maria River

LOE ID:	51836
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38435, Specific Conductivity **Region 3**

Santa Maria River

LOE ID:	51848
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	38206	Region 3
Santa Maria River		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Twenty-seven of the 220 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Twenty-seven of the 220 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38206, Temperature, water	**Region 3**
Santa Maria River	

LOE ID:	51857
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38206, Temperature, water **Region 3**

Santa Maria River

LOE ID:	51856
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38206, Temperature, water **Region 3**

Santa Maria River

LOE ID:	13219
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 61 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38206, Temperature, water **Region 3**

Santa Maria River

LOE ID:	13375
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 10 of 29 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38206, Temperature, water **Region 3**

Santa Maria River

LOE ID:	14295
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 5 of 40 samples exceed the criterion for Water Temperature.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38206, Temperature, water **Region 3**

Santa Maria River

LOE ID:	13468
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38206, Temperature, water **Region 3**

Santa Maria River

LOE ID:	49008
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 9 of 43 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-5/25/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **38582** **Region 3**

Santa Maria River

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38582, Zinc — Region 3

Santa Maria River

LOE ID:	17885
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0

	of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38582, Zinc **Region 3**

Santa Maria River

LOE ID:	17900
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38582, Zinc **Region 3**

Santa Maria River

LOE ID:	58198
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38582, Zinc **Region 3**

Santa Maria River

LOE ID:	58202
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38221**	**Region 3**
Santa Maria River		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Forty-two lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. One of the 217 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 3 of the 217 samples exceed the water quality objective for Agricultural Supply, and 7 of the 217 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 217 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 3 of the 217 samples exceed the water quality objective for Agricultural Supply, and 7 of the 217 samples exceed the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	51877
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	51900
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	51899
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	51885
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	51886
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	51866
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	52259
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	51852
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	51853
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	52202
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	52203
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	52258
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2007-4/21/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	14278
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]

Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	14279
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	14265
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	48971
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 42 samples exceed the

	criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	48972
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	48973
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11359
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11498
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11319
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11320
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11321
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11322
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11375
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11360
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11361
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11362
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]

Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11339
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11479
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11480
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 27

samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]

Temporal Representation: Data was collected over the time period 2/3/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID: 11481

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 27
Number of Exceedances: 3

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 27 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11482
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11497
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Santa Maria River to determine beneficial use support and results are as follows: 3 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 3 monitoring sites [312SBC-Santa Maria River at Bull Canyon Road, 312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/17/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	14264
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	14263
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	14262
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11358
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	48991
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	11338
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-8/11/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	48989
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38221, pH **Region 3**

Santa Maria River

LOE ID:	48990
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	42
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMI-Santa Maria River at Highway 1, 312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**51256**	**Region 3**
Santa Maria River		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Ten lines of evidence are available in the administrative record to assess this pollutant. Three of the three sediment samples exceeded the evaluation guideline used to protect for aquatic life uses and each of these samples also resulted in a significant toxic effect to test organisms. The aquatic life beneficial uses are not supported in sediment habitats and cypermethrin is likely contributing to the observed toxic effects. The single water sample exceeded the evaluation guideline for aquatic life uses.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the three sediment samples exceeded the evaluation guideline used to protect for aquatic life uses and each of these samples also resulted in a significant toxic effect to test organisms. Each of these exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL was approved by USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin **Region 3**

Santa Maria River

LOE ID:	80346
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

	control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin **Region 3**

Santa Maria River

LOE ID:	58429
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin — Region 3

Santa Maria River

LOE ID:	58428
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin — Region 3

Santa Maria River

LOE ID:	80345
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin **Region 3**

Santa Maria River

LOE ID:	58194
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are

	counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin **Region 3**

Santa Maria River

LOE ID:	58190
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin **Region 3**

Santa Maria River

LOE ID:	58443
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin **Region 3**

Santa Maria River

LOE ID:	58444
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use

	support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin **Region 3**

Santa Maria River

LOE ID:	58445
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51256, Cypermethrin **Region 3**

Santa Maria River

LOE ID:	58446
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **53038** **Region 3**

Santa Maria River

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Nine lines of evidence are available in the administrative record to assess this pollutant. Three of the five sediment samples exceeded the evaluation guideline used to protect for aquatic life uses and each of these samples also resulted in a significant toxic effect to test organisms. The aquatic life beneficial uses are not supported in sediment habitats and DDD is likely contributing to the observed toxic effects. One of the two water samples exceeded the evaluation guideline for Municipal and Domestic Supply uses (drinking water). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination from the section 303(d) list. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the five sediment samples exceeded the evaluation guideline used to protect for aquatic life uses and each of these samples also resulted in a significant toxic effect to test organisms. Each of these exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL was approved by USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Santa Maria River

LOE ID:	58459
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River

LOE ID:	58194
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River

LOE ID:	58460
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa

	Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River

LOE ID:	58190
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River

LOE ID:	58461
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River

LOE ID:	58462
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River

LOE ID:	80346
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River

LOE ID:	80345
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River

LOE ID:	1970
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002

	and 2003 (SWAMP, 2004). Sediment was toxic at both stations in both samples. Sediment bulk-phase chemical analyses showed elevated concentrations of DDTs. In the Santa Maria River sample, the sediment criterion for DDD (sum) was not exceeded on either occasion.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria: DDD(sum) = 28.0 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 6/28/2002 and 10/22/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53038, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River

LOE ID:	1969
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected on the Santa Maria River on two occasions: in 2002 and 2003. One of 2 measurements for 4,4'-DDD exceeded the human health criteria for water consumption (0.00083 ppb) (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Human Health (water consumption) = 0.00083 ppb for 4,4'-DDD.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID	**53039**	**Region 3**
Santa Maria River		

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Four of the five sediment samples exceeded the evaluation guideline used to protect for aquatic life uses and each of these samples also resulted in a significant toxic effect to test organisms. The aquatic life beneficial uses are not supported in sediment habitats and DDE is likely contributing to the observed toxic effects. Two of the two water samples exceeded the evaluation guideline for Municipal and Domestic Supply uses (drinking water). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination from the section 303(d) list. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. . Four of the five sediment samples exceeded the evaluation guideline used to protect for aquatic life uses and each of these samples also resulted in a significant toxic effect to test organisms. The aquatic life beneficial uses are not supported in sediment habitats and DDE is likely contributing to the observed toxic effects. Two of the two water samples exceeded the evaluation guideline for Municipal and Domestic Supply uses (drinking water). Each of these exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL was approved by USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) Region 3

Santa Maria River

LOE ID:	1971
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected on the Santa Maria River on two occasions: in 2002 and 2003 (SWAMP, 2004). Two of 2 measurements for 4,4'-DDE exceeded the human health criteria for water consumption (0.00059 ppb).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Human Health (water consumption) = 0.00059 ppb for 4,4'-DDE.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.

Environmental Conditions:
QAPP Information: Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) Region 3

Santa Maria River

LOE ID: 1972

Pollutant: DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: None

Beneficial Use: Wildlife Habitat

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: Chemical monitoring of sediments
Data Used to Assess Water Quality: Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). Sediment was toxic at both stations in both samples. Sediment bulk-phase chemical analyses showed elevated concentrations of DDTs. In the Santa Maria River samples, the sediment criterion for DDE (sum) was exceeded in 2003, but not in 2002.
Data Reference: Placeholder reference 2006 303(d)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: General WQOs:
All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Freshwater Sediment Criteria (Policy):
DDE(sum) = 31.3 ppb
Objective/Criterion Reference: Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation: Samples were collected on 6/28/2002 and 10/22/2003.
Environmental Conditions:
QAPP Information: Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) Region 3

Santa Maria River

LOE ID:	58472
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Santa Maria River

LOE ID:	80345
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella

	azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) Region 3

Santa Maria River

LOE ID:	58471
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) Region 3

Santa Maria River

LOE ID:	80346
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) Region 3

Santa Maria River

LOE ID:	58474
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) Region 3

Santa Maria River

LOE ID:	58473
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) Region 3

Santa Maria River

LOE ID:	58194
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyalella azteca survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The sample was collected at station 312SMAxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53039, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Santa Maria River

LOE ID:	58190
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Three of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in three samples 12/3/2008, 3/31/2009, and 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Santa Maria River station 312SMA.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **32891** **Region 3**

Santa Maria River

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL

TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1, 3.5, and 3.6 of the Listing Policy. Under sections 3.1 and 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Nineteen lines of evidence are available in the administrative record to assess this pollutant. Eleven LOEs summarize water; seven LOEs summarize sediment; and one LOE summarizes tissue. Zero out of twenty-four sediment samples exceeded the aquatic life evaluation guideline. For water, four out of thirteen water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Two out of nine water samples exceeded the evaluation guideline for the municipal beneficial use. Zero out of two water samples exceeded the wildlife habitat beneficial use. For sediment, one out of six sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of zero sediment samples exceeded the wildlife habitat beneficial use. For crab tissue, zero out of zero samples are included in this decision. Data was collected in 2000 and was unavailable at the time of writing this decision For the sediment and tissue matrix, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category for the water matrix. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four out of thirteen water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Two out of nine water samples exceeded the evaluation guideline for the municipal beneficial use. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58541
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58528
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58568
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a

	continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 1/16/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58542
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58543
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River above Estuary - 312SMAxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58555
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are

	reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58556
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58557
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58559
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 1/16/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	58558
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	16874
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32891, Diazinon — Region 3

Santa Maria River

LOE ID:	1956
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. Levels of Diazinon (up to 364 ng/g dry weight) were detected in sand crabs from beaches near the Santa Maria River mouth (Guadalupe) in the spring, again suggesting a link to agricultural land uses. This pesticide was only detected in overwintered adult crabs at this site and date suggesting a link to runoff associated with winter rainfall.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth of the Santa Maria River: 150S, 300S, 450S, and 600S (river).
Temporal Representation:	Samples were collected during May and August 2000 and February 2001.
Environmental Conditions:	This study considers the Santa Maria River watershed an area of agricultural land use and an area of oil production.
QAPP Information:	QA/QC procedures for this study followed SWAMP chemical analysis procedures. The chemistry lab used in this study is the same lab conducting organic chemical analyses for SWAMP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32891, Diazinon — Region 3

Santa Maria River

LOE ID:	16873

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	48793
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	48792
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	15077
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	1958
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment samples were collected from the Lower Santa Maria River and Orcutt Creek (a tributary) in 2002 and 2003 (SWAMP, 2004). One sample was collected from the river in 2003 and diazinon was measured at 0.234 ng/g. No numeric criteria exist for diazinon in sediment.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Sediment was sampled on 10/22/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	15076
Pollutant:	Diazinon

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [312SMA-Santa Maria River above Estuary , 312SMI-Santa Maria River at Highway 1]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32891, Diazinon **Region 3**

Santa Maria River

LOE ID:	1957
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (September 2002 and May 2003). Water was toxic at both stations in September 2002 and May 2003 (SWAMP, 2004). Analysis of chlorpyrifos in water showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC 50 for this pesticide for toxicity to Ceriodaphnia dubia. Toxicity Identification Evaluations of water samples from Orcutt Creek and the Santa Maria River showed toxicity to C. dubia was due to chlorpyrifos. At the station on the Santa Maria River, 0 of 2 samples were in exceedance of the aquatic life criteria. Both measurements were at or below the criterion for aquatic life.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CDFG Hazardous Assessment Criteria for Aquatic Life: 4-day average = 0.10 ppb, 1-hour average = 0.16 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CDFG Hazard Assessment Criteria - 0.10 ug/L 4-day average and 0.16 ug/L 1-hour average. (Siepman & Finlayson, 2000; Finlayson, 2004).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID	**52001**	**Region 3**
Santa Maria River		

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Conclusion:

Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. Three out of seven water samples exceed the evaluation guideline applied to protect for aquatic life beneficial uses. Zero of seven samples exceed the evaluation guideline applied to protect for the municipal beneficial use. For the municipal beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three out of seven samples exceed the evaluation guideline set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 52001, Malathion **Region 3**

Santa Maria River

LOE ID:	58562
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52001, Malathion **Region 3**

Santa Maria River

LOE ID:	58561
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52001, Malathion **Region 3**

Santa Maria River

LOE ID:	58560
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52001, Malathion **Region 3**

Santa Maria River

LOE ID:	58549
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52001, Malathion **Region 3**

Santa Maria River

LOE ID:	58548
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52001, Malathion **Region 3**

Santa Maria River

LOE ID:	58547
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52001, Malathion **Region 3**

Santa Maria River

LOE ID:	58546
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52001, Malathion **Region 3**

Santa Maria River

LOE ID:	58532
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 2 monitoring sites [Santa Maria River - 312SMA, Santa Maria River - 312SMI]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52001, Malathion **Region 3**

Santa Maria River

LOE ID:	58531
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [Santa Maria River - 312SMA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	33928	Region 3
Santa Maria River		

Pollutant:	**Toxaphene**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two out of two fish tissue samples exceeded the evaluation guideline applied to protect for the wildlife habitat beneficial use. Additionally, concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. Toxaphene (up to 104 ng/g dry weight) was detected in a number of sand crab samples (including megalopa) collected from beaches in the vicinity of the Santa Maria River on all sampling dates (May and August 2000 and February 2001). This result suggests that a fairly constant supply of this pesticide may be available on beaches near the Santa Maria River.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of two fish tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33928, Toxaphene — Region 3

Santa Maria River

LOE ID:	1959
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. Toxaphene (up to 104 ng/g dry weight) was detected in a number of sand crab samples (including megalopa) collected from beaches in the vicinity of the Santa Maria River on all sampling dates (May and August 2000 and February 2001). This result suggests that a fairly constant supply of this pesticide may be available on beaches near the Santa Maria River.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth of the Santa Maria River: 150S, 300S, 450S, and 600S (river).
Temporal Representation:	Samples were collected during May and August 2000 and February 2001.
Environmental Conditions:	This study considers the Santa Maria River watershed an area of agricultural land use and an area of oil production.
QAPP Information:	SWAMP Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33928, Toxaphene — Region 3

Santa Maria River

LOE ID:	1960
Pollutant:	Toxaphene

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Wildlife Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Two out of 2 samples exceeded the NAS guideline (Rasmussen, D. 1995, 1997, 2000). The flounder was collected in 1992 and the stickleback in 1999.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast RWQCB Basin Plan: No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	100 ug/kg - NAS guideline (whole fish).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station located just above the beach area at the mouth of the river.
Temporal Representation:	Samples were collected in 1992 and 1999.
Environmental Conditions:	
QAPP Information:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program,1996-2000. Department of Fish and Game.
QAPP Information Reference(s):	

DECISION ID **32714** **Region 3**

Santa Maria River

Pollutant:	**Aluminum**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single water sample exceeded the Evaluation Guideline applied to protect for municipal and domestic supply beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample exceeded the Evaluation Guideline applied to protect for municipal and domestic supply beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32714, Aluminum **Region 3**

Santa Maria River

LOE ID:	1964
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample was collected on the Lower Santa Maria River on 9/3/2002 (SWAMP, 2004). This sample was in exceedance of the secondary MCL.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. Title 22 MCL = 1 mg/L; Secondary MCL = 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	One sample was collected on 9/3/2002.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID	32723	Region 3
Santa Maria River		

Pollutant:	**Dacthal**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for listing under section 3.6 of the Listing Policy. Under section 3.6 a single water toxicity line of evidence can be used to assess the listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has water and sediment toxicity but it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. A numeric criteria for water and a sediment quality guideline is not available that complies with the requirements of section 6.1.3 of the Policy. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32723, Dacthal	**Region 3**
Santa Maria River	

LOE ID:	1967
Pollutant:	Dacthal
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Unknown
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003. Sediment was toxic at both stations in both samples. Sediment bulk-phase chemical analyses showed elevated concentrations of dacthal, however no numeric criteria are available (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 10/22/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32723, Dacthal **Region 3**

Santa Maria River

LOE ID:	1968
Pollutant:	Dacthal
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Unknown
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (September 2002 and May 2003). Water was toxic at both stations in September 2002 and May 2003. Dacthal was detected in both samples on the Santa Maria River, however no numeric criteria are available (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID	**37263**	**Region 3**
Santa Maria River		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of zero tissue samples exceed the evaluation guideline applied to protect for the wildlife habitat beneficial use. Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. HCB occurred in low, but detectable concentrations. The maximum concentration found in August 2000 was 1.5 ng/g. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 37263, Hexachlorobenzene/ HCB **Region 3**

Santa Maria River

LOE ID:	1955
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Concentrations of pesticides were measured in sand crabs (Emerita analoga) collected at the mouth of the Santa Maria River estuary in August 2000 (Dugan et al. 2004). These samples were collected as part of a larger coastline survey in Region 3 that collected sand crabs from a number of beaches. The range of sampling extended from Carpinteria Beach in Ventura County at the southern end of Region 3 to Scott Creek in Santa Cruz County at the northern end of Region 3. HCB occurred in low, but detectable concentrations. The maximum concentration found in August 2000 was 1.5 ng/g.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean. Samples were collected at 4 sites at the mouth of the Santa Maria River: 150S, 300S, 450S, and 600S (river).
Temporal Representation:	Samples were collected during May and August 2000 and February 2001.
Environmental Conditions:	This study considers the Santa Maria River watershed an area of agricultural land use and an area of oil production.
QAPP Information:	QA/QC procedures for this study followed SWAMP chemical analysis procedures. The chemistry lab used in this study is the same lab conducting organic chemical analyses for SWAMP.
QAPP Information Reference(s):	

DECISION ID **32902** **Region 3**

Santa Maria River

Pollutant:	**Iron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A single sample exceeds the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Only one sample exceeded the water quality objective. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32902, Iron **Region 3**

Santa Maria River

LOE ID:	1965
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample was collected on the Lower Santa Maria River on 9/3/2002. This sample was in exceedance of the secondary MCL (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

	Title 22 Secondary MCL = 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	One sample was collected on 9/3/2002.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID **32598** **Region 3**

Santa Maria River

Pollutant:	**Manganese**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A single sample exceeds the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Only one sample exceeded the water quality objective. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32598, Manganese **Region 3**

Santa Maria River

LOE ID:	1966
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample was collected on the Lower Santa Maria River on 9/3/2002 (SWAMP, 2004). This sample was in exceedance of the secondary MCL.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. Title 22 Secondary MCL = 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Lower Santa Maria River (Hydrologic Unit 31201) from its confluence with Orcutt Creek to the mouth of the Santa Maria River estuary where it enters the Pacific Ocean.
Temporal Representation:	One sample was collected on 9/3/2002.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for chemistry, toxicity testing and TIEs for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Orcutt Creek**
Water Body ID: **CAR3121003020011129154708**
Water Body Type: **River & Stream**

DECISION ID **34570** **Region 3**
Orcutt Creek

Pollutant: **Boron**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 97 samples exceed the water quality objective for agricultural uses. Note, this water segment / pollutant combination was added to the CWA section 303(d) List prior to 2006 and the creation of the assessment database. The basis of the original listing is not documented here however, more recent data support the decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of the 97 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34570, Boron **Region 3**
Orcutt Creek

LOE ID: 9751

Pollutant: Boron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Boron.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/12/2000-6/26/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34570, Boron **Region 3**

Orcutt Creek

LOE ID:	9720
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34570, Boron **Region 3**

Orcutt Creek

LOE ID:	51119
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 8 of 49 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-

	Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41821 Region 3

Orcutt Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Ninety-three of the 97 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ninety-three of the 97 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41821, Chloride Region 3

Orcutt Creek

LOE ID:	51120
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 47 of 49 samples exceed the criterion for Chloride.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41821, Chloride **Region 3**

Orcutt Creek

LOE ID:	9721
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	48
Number of Exceedances:	46
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 46 of 48 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40960**	**Region 3**
Orcutt Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Ninety-three of the 97 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ninety-three of the 97 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water

quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40960, Sodium **Region 3**

Orcutt Creek

LOE ID:	9737
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	48
Number of Exceedances:	46
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 46 of 48 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40960, Sodium **Region 3**

Orcutt Creek

LOE ID:	51141
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 47 of 49 samples exceed the criterion for Sodium.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40972**	**Region 3**
Orcutt Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for

LOEs with both pollutant names in this assessment for specific conductivity.

Five lines of evidence are available in the administrative record to assess this pollutant. Fifty-three of the 189 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-three of the 189 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40972, Specific Conductivity **Region 3**

Orcutt Creek

LOE ID:	51121
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 19 of 49 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40972, Specific Conductivity **Region 3**

Orcutt Creek

LOE ID:	11662
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 11 of 36 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40972, Specific Conductivity **Region 3**

Orcutt Creek

LOE ID:	11444
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40972, Specific Conductivity **Region 3**

Orcutt Creek

LOE ID:	48654
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	90
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 21 of 90 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40972, Specific Conductivity **Region 3**

Orcutt Creek

LOE ID:	47893
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/22/2008-10/29/2009 3:02:36 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **40961** **Region 3**

Orcutt Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Fifty-one of the 244 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-one of the 244 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40961, Temperature, water **Region 3**

Orcutt Creek

LOE ID:	13588

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40961, Temperature, water **Region 3**

Orcutt Creek

LOE ID:	14459
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and

	results are as follows: 13 of 46 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40961, Temperature, water **Region 3**

Orcutt Creek

LOE ID:	47894
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/22/2008-10/29/2009 3:02:36 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40961, Temperature, water **Region 3**

Orcutt Creek

LOE ID:	48710
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	96
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 14 of 96 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40961, Temperature, water **Region 3**

Orcutt Creek

LOE ID:	13570
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 15 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40961, Temperature, water **Region 3**

Orcutt Creek

LOE ID:	51178
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	7

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 7 of 49 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42426**	**Region 3**
Orcutt Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. [NUMBER] lines of evidence are available in the administrative record to assess this pollutant. A total of 151 of the 221 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 151 of the 221 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available

	indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42426, Turbidity **Region 3**

Orcutt Creek

LOE ID:	51177
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 27 of 49 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42426, Turbidity **Region 3**

Orcutt Creek

LOE ID:	13571
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 18 of 24 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42426, Turbidity **Region 3**

Orcutt Creek

LOE ID:	14458
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 35 of 46 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42426, Turbidity **Region 3**

Orcutt Creek

LOE ID:	48709
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	96
Number of Exceedances:	66
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 66 of 96 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-

	Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42426, Turbidity **Region 3**

Orcutt Creek

LOE ID:	12619
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **32657** **Region 3**

Orcutt Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which 41 of the 199 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 245 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-one of the 199 samples exceed the water quality objective for unionized ammonia and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on March 8, 2016.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32657, Ammonia **Region 3**

Orcutt Creek

LOE ID:	50893
Pollutant:	Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32657, Ammonia **Region 3**

Orcutt Creek

LOE ID:	51155
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 9 of 48 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32657, Ammonia **Region 3**

Orcutt Creek

LOE ID:	14425
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 12 of 48 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32657, Ammonia **Region 3**

Orcutt Creek

LOE ID:	48573
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	102
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 102 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32657, Ammonia **Region 3**

Orcutt Creek

LOE ID:	9738
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 8 of 36 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1].
Temporal Representation:	Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32657, Ammonia **Region 3**

Orcutt Creek

LOE ID:	9719
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32657, Ammonia **Region 3**

Orcutt Creek

LOE ID:	14240
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 46 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32657, Ammonia **Region 3**

Orcutt Creek

LOE ID:	48574
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 12 of 67 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 4/10/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

DECISION ID	32690	Region 3
Orcutt Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. Thirty of the thirty water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Note that in LOE #16156, one of the samples is not included in the final sample count because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of twenty-seven samples exceeded the USEPA drinking water health advisory.

In sediment, three of five sediment samples exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007). Five of five sediment samples (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This water segment is also on the CWQ section 303(d) List for toxicity to invertebrates in sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Thirty of thirty samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Three of five sediment samples exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. This water segment is also on the CWQ section 303(d) List for toxicity to invertebrates in sediment.

5. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by the USEPA on August 31, 2015.

6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	48576
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	1931
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (June 2002 and May 2003). Sediment was toxic at both stations in both samples (SWAMP, 2004). Analysis of chlorpyrifos in sediment porewater showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC50 for this pesticide to the amphipod Hyalella azteca. Toxicity Identification Evaluations of sediment samples from Orcutt Creek and the Santa Maria River showed toxicity was due to a combination of chlorpyrifos and other pesticides, likely pyrethroid pesticides (refer to attached excel spreadsheet file). Sediment bulk-phase chemical analyses showed elevated concentrations of chlorpyrifos.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected in 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	1930
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Wildlife Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on four separate occasions (June 2002, September 2002, March 2003, and May 2003) (SWAMP, 2004). Water was toxic at both stations in September 2002 and May 2003 (4 exceedances of 4 measurements). Analysis of chlorpyrifos in water showed that on all occasions when water toxicity was observed, concentrations of chlorpyrifos exceeded the LC 50 for this pesticide for toxicity to Ceriodaphnia dubia. Toxicity Identification Evaluations of water samples from Orcutt Creek and the Santa Maria River showed toxicity to C. dubia was due to chlorpyrifos. At the station on Orcutt Creek, 2 of 2 samples were in exceedance of the aquatic life criteria.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CDFG Hazardous Assessment Criteria for Aquatic Life: 4-day average = 0.014 ppb, 1-hour day average = 0.025 ppb.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	15339
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004 Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	23991
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with

	alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312OR1 - Orcutt Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 4/19/2005-4/20/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	16156
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORC001 - Orcutt Creek upstream of Santa Maria River at Sand Plant, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road]
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	23946
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312OR1 - Orcutt Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 5/15/2006-5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55764
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to evaluate sediment toxicity at two stations. Four of the four samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in all four samples. Samples from station 312ORC on the follwoing dates: 12/3/2008, 3/31/2009, and 6/10/2009 and samples from station 312GVT on 6/10/09.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Orcutt Creek, stations 312ORC and 312GVT.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory.SWAMP

	QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55674
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek. Four samples were collected in Orcutt Creek however one sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect therefore the result could not be quantified with the level of certainty required by the Listing Policy. The remaining three samples all exceeded the water quality guideline. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/16/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55652
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55772
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to evaluate sediment toxicity. Six of the eight samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, and 312ORS-Orcutt Solomon Creek at Solomon Road.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55771
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the samples exhibited significant toxicity to the both survival and growth of Hyalella azteca. The samples with significant effects were from sties 312GVT and 312ORC. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The samples were collected at stations 312GVT (Orcutt Creek at Brown Road), 312ORC (Orcutt Creek at the sand plant), and 312ORB (Orcutt Creek at Black Road).
Temporal Representation:	The samples were collected in April 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55661
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55662
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55663
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos. Nine additional samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55664
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos — Region 3

Orcutt Creek

LOE ID:	55765
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed samples collected on 7/1/2008, 10/15/2008, and 10/29/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312ORC-Orcutt Creek at Sand Plant.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos — Region 3

Orcutt Creek

LOE ID:	55672
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32690, Chlorpyrifos **Region 3**

Orcutt Creek

LOE ID:	55673
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.

Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	32635	Region 3
Orcutt Creek		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under sections 2.2, 4.1 and 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Three beneficial uses are assessed. Two of the two water samples exceed the water quality objective for drinking water (California Toxics Rule, 2000). Nine additional samples were included in this assessment and compared to the water quality objectives for Cold Freshwater Habitats, Drinking Water and Collection of fish or shellfish but each of those samples was reported as a Â‘non-detectÂ’ and the laboratory reporting limit was lower than each of the criteria. Because staff cannot determine if the actual concentration exceeds the criteria, those nine samples are not counted in this assessment. In addition, two of ten sediment samples exceed the evaluation guideline (MacDonald et al., 2000) for Cold Freshwater Habitats. This water segment is already on the CWA Section 303(d) List for sediment toxicity and the weight of evidence suggests that DDT concentrations are high enough to be the cause of that toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the two water samples exceed the water quality objective for drinking water and two of the ten sediment samples exceed the evaluation guideline for aquatic life and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Orcutt Creek

LOE ID:	55738
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT, Total. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-2/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Orcutt Creek

LOE ID:	55737
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) Region 3

Orcutt Creek

LOE ID:	55586
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDT. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-2/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) Region 3

Orcutt Creek

LOE ID:	55585
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) Region 3

Orcutt Creek

LOE ID:	55584
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Nine sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criteria for the protection of human health from consumption of organisms only is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Orcutt Creek

LOE ID:	55583
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Nine sample result(s) were not used in the assessment because the laboratory data reporting

	limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) Region 3

Orcutt Creek

LOE ID:	55574
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) Region 3

Orcutt Creek

LOE ID:	55592
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) Region 3

Orcutt Creek

LOE ID:	55854
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) Region 3

Orcutt Creek

LOE ID:	1932
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003 (SWAMP, 2004). Both measurements for total DDTs and 4,4'-DDT were below freshwater acute criteria, however both measurements exceeded human health criteria for water consumption for both 4,4'-DDT and DDTs (total).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Freshwater acute = 1.1 ppb for 4,4'-DDT and DDTs (total). Human Health (water consumption) = 0.00059 ppb for 4,4'-DDT. Human Health (water consumption) = 0.0059 ppb for DDTs (total).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32635, DDT (Dichlorodiphenyltrichloroethane) Region 3

Orcutt Creek

LOE ID:	1933
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). In the Orcutt Creek sample, the sediment criterion for DDT (sum) was exceeded (62.9 ppb) in the 2003 sample, but not in 2002 sample. The DDTs (total) criterion (572 ppb) was not exceeded on either occasion.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations

	found in bottom sediments or aquatic life. Freshwater Sediment Criteria (Policy): DDT(sum) = 62.9 ppb DDTs(total) = 572
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 6/28/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID	**41356**	**Region 3**
Orcutt Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Eleven of the thirty-four samples exceed the evaluation guidelines (Siepmann and Finlayson, 2000) and (Finlayson, 2004) set to protect for aquatic life beneficial uses. One of twenty-seven samples exceeded the USEPA drinking water health advisory. Zero of five sediment samples exceeded the aquatic life evaluation guideline (Ding et al. 2011). One of four sediment samples (pore water) exceeded the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eleven of the thirty-four samples exceed the evaluation guidelines (Siepmann and Finlayson, 2000) and (Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	15340
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-

	Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	16804
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORC001 - Orcutt Creek upstream of Santa Maria River at Sand Plant, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road]
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	48655
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	55781
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	55609
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).

Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	55783
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	55613
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	55789
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/16/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	55782
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	55612
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 5 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41356, Diazinon **Region 3**

Orcutt Creek

LOE ID:	55610
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**32702**	**Region 3**
Orcutt Creek		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of the two water samples exceed the California Toxics Rule (CTR) criteria for drinking water but zero of the three sediment samples exceed the evaluation guideline (MacDonald et al., 2000) for aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the two water samples exceed the California Toxics Rule (CTR) criteria for drinking water and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32702, Dieldrin **Region 3**

Orcutt Creek

LOE ID:	55798
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 32702, Dieldrin **Region 3**

Orcutt Creek

LOE ID:	1935

Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) in May 2003 and the dieldrin level was below the detection limit (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment criterion: max Dieldrin = 6.18 ppm.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The sample was collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	One sample was collected on 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32702, Dieldrin **Region 3**

Orcutt Creek

LOE ID:	1934
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected on Orcutt Creek in September 2002 and May 2003 (SWAMP,

	2004). Two of 2 samples were in exceedance of the CTR Human Health criterion for water consumption.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR Human Health Criterion for consumption of Water & Organisms = 0.00014 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID	**32564**	**Region 3**
Orcutt Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fifty-two of 93 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 9 of 93 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved

by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-two of 93 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32564, Fecal Coliform **Region 3**

Orcutt Creek

LOE ID:	11661
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	45
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 5 of 45 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32564, Fecal Coliform **Region 3**

Orcutt Creek

LOE ID:	11660
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	25
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 25 of 45 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32564, Fecal Coliform **Region 3**

Orcutt Creek

LOE ID:	51052
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	48
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 4 of 48 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32564, Fecal Coliform **Region 3**

Orcutt Creek

LOE ID:	51049
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	48
Number of Exceedances:	27
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 27 of 48 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41631**	**Region 3**
Orcutt Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Seventeen lines of evidence are available in the administrative record to assess this pollutant. Seventy-four of the 138 samples exceed the water quality objective for the Agricultural Supply beneficial use. Thirty-one of the 138 nitrate samples and 167 of the 181 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use.

One hundred thirty-three of the 138 nitrate samples and 141 of the 145 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region NNE Technical Report, 2010) for the Cold Freshwater Habitat beneficial use. In addition, the following supporting evidence of eutrophication indicates that nutrients contribute to the problem.

1) Dissolved oxygen for this water body ranged from 3.02 to 15.27 mg/L, often exceeding (falling below) the Cold and Warm Freshwater Habitat water quality objectives of 7.0 and 5.0 mg/L (respectively). In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).

2) Floating algal mats ranged up to 95% cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration averaged up to 11.34 ug/L, and peaked at 130 ug/L, frequently exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 1.12 mg/L (at the most upstream site) to 6.92 mg/L. All sites but the most upstream site exceed the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 26 g/m2 ash-free dry weight (AFDW) (at the most upstream site) to 146 g/m2 AFDW. All sites but the most upstream site exceed both the Cold Freshwater Habitat screening threshold of 60 mg/m2 and the Warm Freshwater Habitat screening threshold of 80 mg/m2 (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 64 mg/m2 to 364 mg/m2. All sites but the most upstream site exceed both the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy-four of the 138 samples exceed the water quality objective for the Agricultural Supply beneficial use. Thirty-one of the 138 nitrate samples and 167 of the 181 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. One hundred thirty-three of the 138 nitrate samples and 141 of the 145 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region NNE Technical Report, 2010) for the Cold Freshwater Habitat beneficial use and there is sufficient supporting evidence of eutrophication occurring in this water segment as a result of nutrient concentrations.
5. The Santa Maria Watershed Nutrient TMDL has been approved by USEPA on 03/08/2016.
6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	50895
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	49
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 47 of 49 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	51122
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 26 of 49 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	51158
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	48
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 48 of 49 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	51157
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	48
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 48 of 49 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	50896
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	49
Number of Exceedances:	47
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 47 of 49 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	9735
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	48
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 18 of 48 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	9736
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	48
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 34 of 48 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L

	(NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	14257
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 12 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	14353
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 10 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	14239
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 35 of 36 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	48670
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 28 of 28 samples exceed the

	criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	48671
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 27 of 28 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	48673
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	96
Number of Exceedances:	93
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 93 of 96 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at

	Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	48688
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	96
Number of Exceedances:	85
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 85 of 96 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	48656
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	28
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 20 of 28 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	27879
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	45
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41631, Nitrate **Region 3**

Orcutt Creek

LOE ID:	27878
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41473	Region 3
Orcutt Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Nineteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize sediment samples. Four sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and eighteen additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-two total samples are available to assess toxic effects in sediment samples. Nineteen of the twenty-two sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Thirteen LOEs summarize water samples. Eighteen water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and fifty additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, sixty-eight total samples are available to assess toxic effects in water samples.

Forty-nine of the sixty-eight water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of the 22 sediment samples and 49 of the 68 water samples resulted in a significant toxic effect to one or more test organisms for the water quality objective set for aquatic life protection. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	24578
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312OR1 - Orcutt Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	24568
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORC001 - Orcutt Creek upstream of Santa Maria River at Sand Plant, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road]
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	23946
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312OR1 - Orcutt Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 5/15/2006-5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	23920
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312OR1 - Orcutt Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 3/22/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	24567
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312OR1 - Orcutt Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	23991
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312OR1 - Orcutt Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 4/19/2005-4/20/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	23945
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312OR1 - Orcutt Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 9/27/2005-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	23929
Pollutant:	Vertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312OR1 - Orcutt Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	23927
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORC001 - Orcutt Creek upstream of Santa Maria River at Sand Plant, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road]
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	24579
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001)

	data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORC001 - Orcutt Creek upstream of Santa Maria River at Sand Plant, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road].
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	24580
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312OR1 - Orcutt Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	55772
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to evaluate sediment toxicity. Six of the eight samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:	
Spatial Representation:	The samples were collected at 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, and 312ORS-Orcutt Solomon Creek at Solomon Road.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	55771
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the samples exhibited significant toxicity to the both survival and growth of Hyalella azteca. The samples with significant effects were from sties 312GVT and 312ORC. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 312GVT (Orcutt Creek at Brown Road), 312ORC (Orcutt Creek at the sand plant), and 312ORB (Orcutt Creek at Black Road).
Temporal Representation:	The samples were collected in April 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	55770
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity on June 27, 2007 from three different Orcutt Creek sites. One sample exhibited significant toxicity to the invertebrate test organism, Hyalella azteca. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Hyalella azteca, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The SWAMP program has provided guidance (July 2013) defining the range of conductivities that are acceptable for each test organism, the concentration at which alternate test species and or high salinity controls should be used. The samples from 312GVT and 312ORB did show significant toxicity to S. capricornutum however, the conductivity of these sample was greater than 3000 uS/cm, the threshold at which the test should be forgone (SWAMP July 2013). These two sample results will not be counted as exceedances. The sample from 312ORC resulted in significant toxicity to H. azteca (which is the alternate test species for the invertebrate test organism used when conductivity of the sample is greater than 2500 uS/cm). The sample from 32ORC also had significant toxicity to S. capricornutum cell growth. However, the significant effects reported for the S. capricornutum test for the 312ORC sample were not calculated using a high salinity control as specified in the SWAMP memo (July 2013). This sample will be counted as an exceedance because of the toxicity effects to H. azteca. Because the conductivity of the sample water is greater than 1500 uS/cm and the high salinity control was not used to determine toxic effects to S. capricornutum, these results are not counted as exceedances.
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at three stations: 312GVT (Orcutt Creek at Brown Road), 312ORC (Orcutt Creek at the Sand Plant), and 312ORB (Orcutt Creek at Brown Road).
Temporal Representation:	The three samples were collected on June, 27 2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity — Region 3

Orcutt Creek

LOE ID:	55765
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed samples collected on 7/1/2008, 10/15/2008, and 10/29/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312ORC-Orcutt Creek at Sand Plant.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity — Region 3

Orcutt Creek

LOE ID:	55764
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Four samples were collected to evaluate sediment toxicity at two stations. Four of the four samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in all four samples. Samples from station 312ORC on the follwoing dates: 12/3/2008, 3/31/2009, and 6/10/2009 and samples from station 312GVT on 6/10/09.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Orcutt Creek, stations 312ORC and 312GVT.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory.SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	55763
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	21
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-six samples were collected to evaluate water toxicity. Twenty-one of the 26 samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reprouction of Ceriodaphnia dubia (17 samples), Hyalella Azteca (1 sample), Atherinops affinis, Cyprinodon variegatus (2 samples) and Pimephales promelas (1 sample) and growth of Thalassiosira (2 samples).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Fourth Edition. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. EPA-821-R-02-013
Spatial Representation:	The samples were collected at 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, and 312ORS-Orcutt Solomon Creek at Solomon Road.
Temporal Representation:	The samples were collected from 2007 to 2010 at stations 312ORI and 312ORC and in January, March and September of 2008 at stations 312ORB and 312ORS.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	55762
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples was collected to evaluate water toxicity. Nine of the nine samples exhibited significant toxicity. One sample was tested using only survival of Hyalella azteca (2/7/09) and this sample did have significant toxic effects. Eight of the toxicity tests included survival of Ceriodaphnia dubia and two of those samples were also tested for toxic effects to survival of Hyalella azteca. Statistically significant effects to Ceriodaphnia dubia were reproted in all eight samples. The sample from 10/15/09 also had toxic effects to Hyalella azteca, but this sample is only counted once.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 312ORC - Orcutt Creek at Sand Plant.
Temporal Representation:	The sample was collected between January 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41473, Toxicity **Region 3**

Orcutt Creek

LOE ID:	55740
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twelve samples were collected to evaluate water toxicity. Five of the twelve samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia survival were observed in the following samples: From station 312ORC on 02/3/2009, 3/31/2009, and 8/26/2009 and from station 312GVT on 02/3/2009, and 8/26/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at two stations; 312GVT - Orcutt Creek at Brown Road and 312ORC - Orcutt Creek at the Sand Plant.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008. This is a SWAMP field crew and lab working under contract for the RB.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48770** **Region 3**

Orcutt Creek

Pollutant:	**Alachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48770, Alachlor **Region 3**

Orcutt Creek

LOE ID:	55617
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Alachlor is 0.002 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48770, Alachlor **Region 3**

Orcutt Creek

LOE ID:	55618
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48764** **Region 3**

Orcutt Creek

Pollutant:	**Atrazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48764, Atrazine **Region 3**

Orcutt Creek

LOE ID:	55624
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for atrazine is 0.001 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48764, Atrazine **Region 3**

Orcutt Creek

LOE ID:	55625
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life 50% effect concentration (EC50) for Atrazine is 43 ug/L based on a 14 day toxicity study of Duckweed (Lemna gibba).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48776** **Region 3**

Orcutt Creek

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48776, Azinphos-methyl (Guthion) **Region 3**

Orcutt Creek

LOE ID:	55626
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection

Agency. Office of Water. Office of Science and Technology

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47310 Region 3

Orcutt Creek

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two water samples exceed the evaluation guideline (Fojut et al. 2012) for aquatic life protection and zero of the five sediment samples exceed the evaluation guideline (Amweg et al., 2005) for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two water samples and zero of the five sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47310, Bifenthrin Region 3

Orcutt Creek

LOE ID:	55632
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47310, Bifenthrin **Region 3**

Orcutt Creek

LOE ID:	55635
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47310, Bifenthrin **Region 3**

Orcutt Creek

LOE ID:	55633
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 47310, Bifenthrin **Region 3**

Orcutt Creek

LOE ID:	55634
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for BIFENTHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48777** **Region 3**

Orcutt Creek

Pollutant:	**Butylate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 45samples exceed the evaluation guideline for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 45 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48777, Butylate **Region 3**

Orcutt Creek

LOE ID:	55640
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt

	Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48765 Region 3

Orcutt Creek

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48765, Carbofuran Region 3

Orcutt Creek

LOE ID:	55643
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for carbofuran is 18 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48765, Carbofuran **Region 3**

Orcutt Creek

LOE ID:	55644
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48792 Region 3

Orcutt Creek

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48792, Chlordane Region 3

Orcutt Creek

LOE ID:	55649
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**41648**	**Region 3**
Orcutt Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eight of the 227 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 227 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41648, Chlorophyll-a **Region 3**

Orcutt Creek

LOE ID:	51156
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 45 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41648, Chlorophyll-a **Region 3**

Orcutt Creek

LOE ID:	14426
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 45 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41648, Chlorophyll-a — Region 3

Orcutt Creek

LOE ID:	48575
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	90
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 90 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41648, Chlorophyll-a — Region 3

Orcutt Creek

LOE ID:	9722

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 47 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48778**	**Region 3**
Orcutt Creek		

Pollutant:	**Chlorothalonil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48778, Chlorothalonil **Region 3**

Orcutt Creek

LOE ID:	55651
Pollutant:	Chlorothalonil
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorothalonil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the 2006 USEPA Drinking Water Standards and Health Advisories, the Ten-day Health Advisory for Chlorothalonil is 200 ug/L.

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48799 Region 3

Orcutt Creek

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. One of the one water samples exceed the evaluation guideline (Fojut et al. 2012) for aquatic life protection and one of the five sediment samples exceed the evaluation guideline (Maund et al., 2002) for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the one water samples and one of the five sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48799, Cypermethrin Region 3

Orcutt Creek

LOE ID:	55714

Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin. One of the two sample results was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48799, Cypermethrin **Region 3**

Orcutt Creek

LOE ID:	55713
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for CYPERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not

	be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48799, Cypermethrin **Region 3**

Orcutt Creek

LOE ID:	55701
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cypermethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).

Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48799, Cypermethrin **Region 3**

Orcutt Creek

LOE ID:	55700
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48803 **Region 3**

Orcutt Creek

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 water samples exceed the evaluation guideline for aquatic life protection and zero of the five sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48803, Deltamethrin **Region 3**

Orcutt Creek

LOE ID:	55595
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48803, Deltamethrin **Region 3**

Orcutt Creek

LOE ID:	55594
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of

	Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48803, Deltamethrin **Region 3**

Orcutt Creek

LOE ID:	55601
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48803, Deltamethrin **Region 3**

Orcutt Creek

LOE ID:	55593
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48808**	**Region 3**
Orcutt Creek		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the evaluation guideline for aquatic life uses . This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48808, Demeton **Region 3**

Orcutt Creek

LOE ID:	55604
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48808, Demeton **Region 3**

Orcutt Creek

LOE ID:	55602
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48808, Demeton **Region 3**

Orcutt Creek

LOE ID:	55603
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48809**	**Region 3**
Orcutt Creek		

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the evaluation guidelines for aquatic life uses and for drinking water . This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48809, Dichlorvos **Region 3**

Orcutt Creek

LOE ID:	55796
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48809, Dichlorvos **Region 3**

Orcutt Creek

LOE ID:	55797
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48809, Dichlorvos **Region 3**

Orcutt Creek

LOE ID:	55790
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48809, Dichlorvos **Region 3**

Orcutt Creek

LOE ID:	55791
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48809, Dichlorvos **Region 3**

Orcutt Creek

LOE ID:	79298
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48809, Dichlorvos **Region 3**

Orcutt Creek

LOE ID:	79299
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48810** **Region 3**

Orcutt Creek

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the evaluation guideline for aquatic life uses and one of the 12 samples exceeds the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the evaluation guideline for aquatic life uses and one of the 12 samples exceeds the evaluation guideline for drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48810, Dimethoate **Region 3**

Orcutt Creek

LOE ID:	55804
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48810, Dimethoate **Region 3**

Orcutt Creek

LOE ID:	55807
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48810, Dimethoate **Region 3**

Orcutt Creek

LOE ID:	55806
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48810, Dimethoate **Region 3**

Orcutt Creek

LOE ID:	55813
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48810, Dimethoate **Region 3**

Orcutt Creek

LOE ID:	55805
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.

Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48810, Dimethoate **Region 3**

Orcutt Creek

LOE ID:	55799
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48811** **Region 3**

Orcutt Creek

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of

Conclusion:	the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the evaluation guidelines for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48811, Disulfoton **Region 3**

Orcutt Creek

LOE ID:	55815
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48811, Disulfoton **Region 3**

Orcutt Creek

LOE ID:	55822
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48811, Disulfoton **Region 3**

Orcutt Creek

LOE ID:	55816
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DISULFOTON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48811, Disulfoton **Region 3**

Orcutt Creek

LOE ID:	55817
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]

Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48793** **Region 3**

Orcutt Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48793, Endrin **Region 3**

Orcutt Creek

LOE ID:	55823
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48804**	**Region 3**
Orcutt Creek		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 water samples exceed the evaluation guideline for aquatic life protection and zero of the five sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial

uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48804, Esfenvalerate/Fenvalerate **Region 3**

Orcutt Creek

LOE ID:	55825
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48804, Esfenvalerate/Fenvalerate **Region 3**

Orcutt Creek

LOE ID:	55831
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48804, Esfenvalerate/Fenvalerate **Region 3**

Orcutt Creek

LOE ID:	55832
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48804, Esfenvalerate/Fenvalerate **Region 3**

Orcutt Creek

LOE ID:	55830
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration

	(LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48804, Esfenvalerate/Fenvalerate **Region 3**

Orcutt Creek

LOE ID:	55824
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48779** **Region 3**

Orcutt Creek

Pollutant:	**Ethalfluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48779, Ethalfluralin **Region 3**

Orcutt Creek

LOE ID:	55833
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 1.4 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L as determined in a 50 day toxicity study with the Bluegill sunfish, Lepomis macrochirus. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48813**	**Region 3**
Orcutt Creek		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the evaluation guideline for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48813, Ethoprop **Region 3**

Orcutt Creek

LOE ID:	55839
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48813, Ethoprop **Region 3**

Orcutt Creek

LOE ID:	55840
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48813, Ethoprop **Region 3**

Orcutt Creek

LOE ID:	55838
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use

	support and results are as follows: 0 of 6 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48805**	**Region 3**
Orcutt Creek		

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline for aquatic life protection and zero of the three sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48805, Fenpropathrin **Region 3**

Orcutt Creek

LOE ID:	55846
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48805, Fenpropathrin **Region 3**

Orcutt Creek

LOE ID:	55847

Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48796**	**Region 3**
Orcutt Creek		

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the one samples exceed the evaluation guideline (Maul et al. 2008) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is

set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the one samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48796, Fipronil **Region 3**

Orcutt Creek

LOE ID:	55848
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 2 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 1 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 48814 Region 3

Orcutt Creek

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life protection. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48814, Fipronil Sulfide Region 3

Orcutt Creek

LOE ID:	55849
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 2 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 1 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**48815**	**Region 3**
Orcutt Creek		

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline for aquatic life protection. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported

and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48815, Fipronil Sulfone **Region 3**

Orcutt Creek

LOE ID:	55741
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]

Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 48780 Region 3
Orcutt Creek

Pollutant:	**Hexazinone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48780, Hexazinone Region 3
Orcutt Creek

LOE ID:	55742
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L based on a 120 hour toxicity study of green algae (selenastrum capricornutum).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48781**	**Region 3**
Orcutt Creek		

Pollutant:	**Iprodione**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation:	pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48781, Iprodione **Region 3**

Orcutt Creek

LOE ID:	55743
Pollutant:	Iprodione
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Iprodione.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Iprodione is 280 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water with 0.04 mg/kg/day as the reference dose. An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Summary for Iprodione
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48794** **Region 3**

Orcutt Creek

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48794, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Orcutt Creek

LOE ID:	55744
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48816 Region 3

Orcutt Creek

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the evaluation guidelines for aquatic life uses and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48816, Methidathion Region 3

Orcutt Creek

LOE ID:	55753
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48816, Methidathion **Region 3**

Orcutt Creek

LOE ID:	55756
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48816, Methidathion **Region 3**

Orcutt Creek

LOE ID:	55755
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

	Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48816, Methidathion **Region 3**

Orcutt Creek

LOE ID:	55754
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48806** **Region 3**

Orcutt Creek

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 water samples exceed the evaluation guidelines for aquatic life protection and drinking water. Zero of the five sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55769
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55775
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55766
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55767
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55768
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55759
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55758
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55757
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55761
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phorate is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48806, Methyl Parathion **Region 3**

Orcutt Creek

LOE ID:	55760
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48766** **Region 3**

Orcutt Creek

Pollutant:	**Molinate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48766, Molinate **Region 3**

Orcutt Creek

LOE ID:	55777
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48766, Molinate **Region 3**

Orcutt Creek

LOE ID:	55776
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for molinate is 20 ug/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48782	Region 3
Orcutt Creek		

Pollutant:	**Napropamide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48782, Napropamide	**Region 3**
Orcutt Creek	

LOE ID:	55778
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48783 Region 3

Orcutt Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 49 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 49 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 48783, Nitrogen, Nitrite Region 3

Orcutt Creek

LOE ID:	51139

Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41022**	**Region 3**
Orcutt Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 241 samples exceeded the water quality objectives for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median

value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 241 samples exceeded the water quality objectives for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	51174
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 49 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	51175
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 15 of 49 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	13572
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	13573
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable

	water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	13555
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 7 of 42 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	48689
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	90
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 6 of 90 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	48690
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	90
Number of Exceedances:	20

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 20 of 90 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	47875
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312ORC-

	Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/22/2008-10/29/2009 3:02:36 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	14243
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 46 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	14427

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 8 of 46 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41022, Oxygen, Dissolved **Region 3**

Orcutt Creek

LOE ID:	13554
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for

	Orcutt Creek to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48795**	**Region 3**
Orcutt Creek		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48795, PCBs (Polychlorinated biphenyls) **Region 3**

Orcutt Creek

LOE ID:	55793
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48784** **Region 3**

Orcutt Creek

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48784, Parathion **Region 3**

Orcutt Creek

LOE ID:	55792
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48785 Region 3

Orcutt Creek

Pollutant:	**Pentachlorobenzene (PCNB)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48785, Pentachlorobenzene (PCNB) Region 3

Orcutt Creek

LOE ID:	55794
Pollutant:	Pentachlorobenzene (PCNB)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PCNB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services archived Advisory Level for Pentachloronitrobenzene is 20 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48807**	**Region 3**
Orcutt Creek		

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Five lines of evidence are available in the administrative record to assess this pollutant. Two LOEs summarize water samples. One of the one water samples exceed the evaluation guideline for aquatic life protection (note LOE 55801 states that zero of zero samples exceed. This is because the nine samples are reported as 'non-detect' and the laboratories reporting limit is above the evaluation guideline so it cannot be determined if there was an exceedance). Two LOEs summarize Permethrin sediment samples. One of the five sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses and this sample also resulted in a significant toxic effect to invertebrate test organisms. However, these sample sizes are insufficient to determine, with the power and confidence

of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One water sample and one sediment sample exceed the evaluation guidelines for aquatic life uses but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48807, Permethrin, total **Region 3**

Orcutt Creek

LOE ID:	55802
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin. A second sample was collected in Orcutt Creek but is not included in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides.

	Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48807, Permethrin, total **Region 3**

Orcutt Creek

LOE ID:	55801
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for PERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48807, Permethrin, total **Region 3**

Orcutt Creek

LOE ID:	55800
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48807, Permethrin, total **Region 3**

Orcutt Creek

LOE ID:	55795
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Permethrin.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48807, Permethrin, total **Region 3**

Orcutt Creek

LOE ID:	55764
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to evaluate sediment toxicity at two stations. Four of the four samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in all four samples. Samples from station 312ORC on the follwoing dates: 12/3/2008, 3/31/2009, and 6/10/2009 and samples from station 312GVT on 6/10/09.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation:	The samples were collected at Orcutt Creek, stations 312ORC and 312GVT.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory.SWAMP QAPP, labs, and field staff.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48817 Region 3

Orcutt Creek

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the evaluation guidelines for aquatic life uses and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48817, Phorate Region 3

Orcutt Creek

LOE ID:	55821
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48817, Phorate **Region 3**

Orcutt Creek

LOE ID:	55818
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48817, Phorate **Region 3**

Orcutt Creek

LOE ID:	55819
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48817, Phorate **Region 3**

Orcutt Creek

LOE ID:	55820
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48817, Phorate **Region 3**

Orcutt Creek

LOE ID:	55812
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48817, Phorate **Region 3**

Orcutt Creek

LOE ID:	55826
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a

	factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48818 Region 3

Orcutt Creek

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the evaluation guidelines for aquatic life uses and for drinking water . This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48818, Phosmet Region 3

Orcutt Creek

LOE ID:	55829
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48818, Phosmet **Region 3**

Orcutt Creek

LOE ID:	55828
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48818, Phosmet **Region 3**

Orcutt Creek

LOE ID:	55827
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48818, Phosmet **Region 3**

Orcutt Creek

LOE ID:	55834

Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48767**	**Region 3**
Orcutt Creek		

Pollutant:	**Prometryn**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48767, Prometryn **Region 3**

Orcutt Creek

LOE ID:	55835
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48767, Prometryn **Region 3**

Orcutt Creek

LOE ID:	55836
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for prometryn is 28 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48786** **Region 3**

Orcutt Creek

Pollutant:	**Propanil (DCPA mono- and di-acid degrad)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a

minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48786, Propanil (DCPA mono- and di-acid degrad) **Region 3**

Orcutt Creek

LOE ID:	55837
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.6 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L, as determined in a 60 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48787 Region 3

Orcutt Creek

Pollutant:	**Propiconazole**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48787, Propiconazole Region 3

Orcutt Creek

LOE ID:	55841
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L) based on a 96 toxicity study of Rainbow trout (Oncorhynchus mykiss).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48788**	**Region 3**
Orcutt Creek		

Pollutant:	**Resmethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48788, Resmethrin **Region 3**

Orcutt Creek

LOE ID:	55842
Pollutant:	Resmethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for RESMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Resmethrin is 210 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48768** **Region 3**

Orcutt Creek

Pollutant:	**Simazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48768, Simazine **Region 3**

Orcutt Creek

LOE ID:	55843
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for simazine is 0.004 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]

Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48768, Simazine **Region 3**

Orcutt Creek

LOE ID:	55844
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48769** **Region 3**

Orcutt Creek

Pollutant:	**Thiobencarb/Bolero**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48769, Thiobencarb/Bolero **Region 3**

Orcutt Creek

LOE ID:	55853
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC)

	of 2.0 ug/L and the no observed effect concentration (NOEC) of 1.0 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48769, Thiobencarb/Bolero **Region 3**

Orcutt Creek

LOE ID:	55852
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for thiobencarb is 0.07 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48789** **Region 3**

Orcutt Creek

Pollutant:	**Trifluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48789, Trifluralin **Region 3**

Orcutt Creek

LOE ID:	55773
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.18 ug/L and the no observed effect concentration (NOEC) of 1.14 ug/L as determined in a 48 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48790**	**Region 3**
Orcutt Creek		

Pollutant:	**Vinclozolin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48790, Vinclozolin **Region 3**

Orcutt Creek

LOE ID:	55780
Pollutant:	Vinclozolin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Vinclozolin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Vinclozolin is 180 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **41115** **Region 3**

Orcutt Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Eight of the 238 samples exceed the water quality objective for

Agriculture, six of the 238 samples exceed the water quality objectives for Cold Freshwater Habitats, and 12 of the 238 samples exceed the water quality objectives for Drinking Water and Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 238 samples exceed the water quality objective for Agriculture, six of the 238 samples exceed the water quality objectives for Cold Freshwater Habitats, and 12 of the 238 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	50897
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	51176
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	51053
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	49
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	51140
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	51051
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312GVT-Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	11715
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	11716
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	11717
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	11718
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	11463
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	11447
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	11462
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]

Temporal Representation: Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID: 11443

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 39

Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]

Temporal Representation: Data was collected over the time period 2/3/2000-4/6/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	11445
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	11446
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 3 monitoring sites [312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	14440
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	46
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	14441
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	14442
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	46
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	14443
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	46
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	14456
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	46
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	48708
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	90
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 4 of 90 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	48691
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	90
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 90 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	48692
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	90
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 90 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	48706
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	90
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 4 of 90 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	48707
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 4 of 90 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 4 monitoring sites [312ORI-Orcutt Solomon Creek at Highway 1, 312ORB-Orcutt Solomon Creek at Black Road, 312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	47876
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/22/2008-10/29/2009 3:02:36 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	47877
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/22/2008-10/29/2009 3:02:36 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	47878
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/22/2008-10/29/2009 3:02:36 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	47879
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/22/2008-10/29/2009 3:02:36 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41115, pH **Region 3**

Orcutt Creek

LOE ID:	47880
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [312ORC-Orcutt Solomon Creek u/s Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/22/2008-10/29/2009 3:02:36 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **48771** **Region 3**

Orcutt Creek

Pollutant:	**Carbaryl**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. However, two of the nine samples exceed the evaluation guidelines for aquatic life protection and this use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the nine samples exceed the evaluation guidelines for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48771, Carbaryl **Region 3**

Orcutt Creek

LOE ID:	55641
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for carbaryl is 40 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48771, Carbaryl **Region 3**

Orcutt Creek

LOE ID:	55642
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48797**	**Region 3**
Orcutt Creek		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of the two water samples exceed the evaluation guideline (Fojut et al. 2012) for aquatic life protection. Zero of the five sediment samples exceed the evaluation guideline (Amweg et al., 2005) for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination to the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the two water samples exceed the evaluation guidelines and this exceeds the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48797, Cyfluthrin **Region 3**

Orcutt Creek

LOE ID:	55686
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Cyfluthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48797, Cyfluthrin **Region 3**

Orcutt Creek

LOE ID:	55685
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48797, Cyfluthrin **Region 3**

Orcutt Creek

LOE ID:	55675
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for

	Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48798**	**Region 3**
Orcutt Creek		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the two water samples exceed the evaluation guideline (Fojut et al. 2012) for aquatic life protection. Zero of the five sediment samples exceed the evaluation guideline (Amweg et al., 2005) for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination to the CWA section 303(d)

List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the two water samples exceed the evaluation guidelines and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48798, Cyhalothrin, Lambda **Region 3**

Orcutt Creek

LOE ID:	55698
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyhalothrin, lambda, total. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48798, Cyhalothrin, Lambda **Region 3**

Orcutt Creek

LOE ID:	55699
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48798, Cyhalothrin, Lambda **Region 3**

Orcutt Creek

LOE ID:	55687
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48798, Cyhalothrin, Lambda **Region 3**

Orcutt Creek

LOE ID:	55688
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**48800**	**Region 3**
Orcutt Creek		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Nine lines of evidence are available in the administrative record to assess this pollutant. Two of the two water samples exceed the evaluation guideline (California Toxics Rule) for drinking water. In addition, three of the eight sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life. Each of these sediment samples were also tested for toxicity to invertebrates and did have significant toxic effects. This water segment is on the CWA section 303(d) List for sediment toxicity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination to the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the two water samples exceed the evaluation guideline for drinking water. In addition, three of

the eight sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life and these samples did have significant toxic effects to invertebrate test organisms. Each of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48800, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Orcutt Creek

LOE ID:	55727
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDD. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-2/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48800, DDD (Dichlorodiphenyldichloroethane) Region 3

Orcutt Creek

LOE ID:	55726
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48800, DDD (Dichlorodiphenyldichloroethane) Region 3

Orcutt Creek

LOE ID:	55725
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDD(p,p). Nine sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD criteria for the protection of human health from consumption of organisms only is 0.00084 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48800, DDD (Dichlorodiphenyldichloroethane) Region 3

Orcutt Creek

LOE ID:	55716
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDD(p,p). Nine sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00083 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48800, DDD (Dichlorodiphenyldichloroethane) Region 3

Orcutt Creek

LOE ID:	55715
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48800, DDD (Dichlorodiphenyldichloroethane) Region 3

Orcutt Creek

LOE ID:	55771
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the samples exhibited significant toxicity to the both survival and growth of Hyalella azteca. The samples with significant effects were from sties 312GVT and 312ORC. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 312GVT (Orcutt Creek at Brown Road), 312ORC (Orcutt Creek at the sand plant), and 312ORB (Orcutt Creek at Black Road).
Temporal Representation:	The samples were collected in April 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48800, DDD (Dichlorodiphenyldichloroethane) Region 3

Orcutt Creek

LOE ID:	55765
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed samples collected on 7/1/2008, 10/15/2008, and 10/29/2009.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312ORC-Orcutt Creek at Sand Plant.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48800, DDD (Dichlorodiphenyldichloroethane) Region 3

Orcutt Creek

LOE ID:	1942
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). In the Orcutt Creek sample, the sediment criterion for DDD (sum) was not exceeded on either occasion.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria (Policy): DDD(sum) = 28.0 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation: Samples were collected on 6/28/2002 and 5/28/2003.
Environmental Conditions:
QAPP Information: Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 48800, DDD (Dichlorodiphenyldichloroethane) Region 3

Orcutt Creek

LOE ID: 1941

Pollutant: DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003 (SWAMP, 2004). Both measurements for 4,4'-DDD exceeded the human health criteria for water consumption (0.00083 ppb).
Data Reference: Placeholder reference 2006 303(d)

SWAMP Data: SWAMP

Water Quality Objective/Criterion: General WQOs:
All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.

No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

CTR criteria for:
Human Health (water consumption) = 0.00083 ppb for 4,4'-DDD.
Objective/Criterion Reference: Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation: Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:
QAPP Information: Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the

labs participating in the SWAMP program.

QAPP Information Reference(s):

DECISION ID	48802	Region 3
Orcutt Creek		

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Eight lines of evidence are available in the administrative record to assess this pollutant. Eight of the eight water samples exceed the evaluation guideline (California Toxics Rule) for drinking water. In addition, eight of the ten sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life. Each of these sediment samples were also tested for toxicity to invertebrates and did have significant toxic effects. This water segment is on the CWA section 303(d) List for sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination to the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the eight water samples exceed the evaluation guideline for drinking water. In addition, eight of the ten sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life and these samples did have significant toxic effects to invertebrate test organisms. Each of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48802, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Orcutt Creek

LOE ID:	1944
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003 (SWAMP, 2004). In the Orcutt Creek sample, the sediment criterion for DDE (sum) was exceeded in 2003, but not in 2002.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. Freshwater Sediment Criteria: DDE(sum) = 31.3 ppb
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 6/28/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48802, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Orcutt Creek

LOE ID:	1943
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Samples were collected on Orcutt Creek on two occasions: in 2002 and 2003 (SWAMP, 2004). Both measurements for 4,4'-DDE exceeded the human health criteria for water consumption (0.00059 ppb).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. CTR criteria for: Human Health (water consumption) = 0.00059 ppb for 4,4'-DDE.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at one station on Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48802, DDE (Dichlorodiphenyldichloroethylene) Region 3

Orcutt Creek

LOE ID:	55728
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48802, DDE (Dichlorodiphenyldichloroethylene) Region 3

Orcutt Creek

LOE ID:	55771
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the samples exhibited significant toxicity to the both survival and growth of Hyalella azteca. The samples with significant effects were from sties 312GVT and 312ORC. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064

	SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 312GVT (Orcutt Creek at Brown Road), 312ORC (Orcutt Creek at the sand plant), and 312ORB (Orcutt Creek at Black Road).
Temporal Representation:	The samples were collected in April 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48802, DDE (Dichlorodiphenyldichloroethylene) Region 3

Orcutt Creek

LOE ID:	55572
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 7/1/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48802, DDE (Dichlorodiphenyldichloroethylene) Region 3

Orcutt Creek

LOE ID:	55571
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for DDE(p,p). One sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDE(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48802, DDE (Dichlorodiphenyldichloroethylene) Region 3

Orcutt Creek

LOE ID:	55765
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed samples collected on 7/1/2008, 10/15/2008, and 10/29/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

	that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312ORC-Orcutt Creek at Sand Plant.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 48802, DDE (Dichlorodiphenyldichloroethylene) Region 3

Orcutt Creek

LOE ID:	55573
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for DDE. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-2/7/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

QAPP Information Reference(s): Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	47351	Region 3
Orcutt Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Twenty-eight of 48 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-eight of 48 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2013. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47351, Escherichia coli (E. coli)	**Region 3**
Orcutt Creek	

LOE ID:	51050
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	48
Number of Exceedances:	28
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Orcutt Creek to determine beneficial use support and results are as follows: 28 of 48 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 5 monitoring sites [312ORC-Orcutt Solomon Creek u/s Santa Maria River, 312ORI-Orcutt Solomon Creek at Highway 1, 312GVT- Orcutt Creek at Brown Road, 312ORB-Orcutt Solomon Creek at Black Road, 312ORS-Orcutt Solomon Creek at Solomon Road]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47311**	**Region 3**
Orcutt Creek		

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 17 samples exceed the evaluation guideline for aquatic life protection. However, zero of the 21 samples exceed the USEPA drinking water health advisory level and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section

303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of the 17 samples exceed the evaluation guideline for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 47311, Malathion **Region 3**

Orcutt Creek

LOE ID:	55748
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.

QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47311, Malathion **Region 3**

Orcutt Creek

LOE ID:	55749
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47311, Malathion **Region 3**

Orcutt Creek

LOE ID:	55745
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Malathion.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47311, Malathion **Region 3**

Orcutt Creek

LOE ID:	55746
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47311, Malathion — Region 3

Orcutt Creek

LOE ID:	55747
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47311, Malathion — Region 3

Orcutt Creek

LOE ID:	55752
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Orcutt Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Ck. at Brown Road - 312GVT, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47311, Malathion **Region 3**

Orcutt Creek

LOE ID:	55751
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Orcutt Creek to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.

Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 2 monitoring sites [Orcutt Creek - 312ORI, Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 8/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47311, Malathion **Region 3**

Orcutt Creek

LOE ID:	55750
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Orcutt Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for MALATHION. Four sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Orcutt Creek was collected at 1 monitoring site [Orcutt Creek u/s Santa Maria River - 312ORC]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	33289	Region 3
Orcutt Creek		

Pollutant:	**Aluminum**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A single sample exceeds the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Only one sample exceeded the Secondary MCL. More data is needed to determine if the water quality objective is exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33289, Aluminum	**Region 3**
Orcutt Creek	

LOE ID:	1936
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample was collected on Orcutt Creek in September 2002. This sample was in exceedance of the secondary MCL (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. Title 22 MCL = 1 mg/L; Secondary MCL = 0.2 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	One sample was collected on 9/3/2002.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID	**32517**	**Region 3**
Orcutt Creek		

Pollutant:	**Dacthal**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 sediment toxicity was recorded but it cannot be determined if the pollutant is likely to cause or contribute to the toxic effect. Dacthal was also detected in the water column but there in no numeric criteria or guideline that meets the requirement of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. A sediment based numeric criteria in sediment or in the water column for dacthal is not available that complies with the requirements of section 6.1.3 of the Policy. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32517, Dacthal **Region 3**

Orcutt Creek

LOE ID:	1940
Pollutant:	Dacthal
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) on two separate occasions (September 2002 and May 2003). Water was toxic at both stations in September 2002 and May 2003 (Anderson, B. 2004). Dacthal was detected in both samples on the Santa Maria River, however no numeric criteria are available.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Orcutt Creek (a tributary to the Santa Maria River) at two sampling stations.
Temporal Representation:	Samples were collected on 9/3/2002 and 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32517, Dacthal **Region 3**

Orcutt Creek

LOE ID:	1939
Pollutant:	Dacthal
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Chemical monitoring of sediments
Data Used to Assess Water Quality:	Sediment was sampled at Orcutt Creek (ORC) and in the Santa Maria River (SMA) in 2002 and 2003. Sediment was toxic at both stations in both samples (Anderson, B. 2004). Sediment bulk-phase chemical analyses showed elevated concentrations of dacthal, however no numeric criteria are available.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Orcutt Creek (a tributary to the Santa Maria River) at two sampling stations.
Temporal Representation:	Samples were collected on 5/28/2003.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures for the primary study were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID	**33494**	**Region 3**
Orcutt Creek		

Pollutant:	**Iron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A single sample exceeds the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Only one sample exceeded the Title 22 Secondary MCL. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. More data is needed to determine if the water quality objective is exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33494, Iron **Region 3**

Orcutt Creek

LOE ID:	1937
Pollutant:	Iron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample was collected on Orcutt Creek in September 2002 (SWAMP, 2004). This sample was in exceedance of the secondary MCL.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods. Title 22 Secondary MCL = 0.3 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	One sample was collected on 9/3/2002.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

DECISION ID **32753** **Region 3**

Orcutt Creek

Pollutant:	**Manganese**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. A single sample exceeds the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Only one sample exceeded the Title 22 Secondary MCL. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. More data is needed to determine if the water quality objective is exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32753, Manganese — Region 3

Orcutt Creek

LOE ID:	1938
Pollutant:	Manganese
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample was collected on Orcutt Creek in September 2002 (SWAMP, 2004). This sample was in exceedance of the secondary MCL.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	General WQOs: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods. Title 22 Secondary MCL = 0.05 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Orcutt Creek (a tributary to the Santa Maria River).
Temporal Representation:	One sample was collected on 9/3/2002.
Environmental Conditions:	
QAPP Information:	Quality assurance and quality control procedures were identical to those used in the Surface Water Ambient Monitoring Program (SWAMP). The toxicity and chemistry laboratories participating in this study are the same labs responsible for the SWAMP QAPP, and are the labs participating in the SWAMP program.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Bradley Canyon Creek**
Water Body ID: **CAR3121003020011121144840**
Water Body Type: **River & Stream**

DECISION ID **42976** **Region 3**
Bradley Canyon Creek

Pollutant: **Turbidity**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Thirty-one of the 41 samples exceed the the evaluation guideline used to interpret the cold water habitat water quality objective and 30 of the 41 samples also exceeded the the evaluation guideline used to interpret the warm freshwater water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-one of the 41 samples exceed the the evaluation guideline used to interpret the cold water habitat water quality objective and 30 of the 41 samples also exceeded the the evaluation guideline used to interpret the warm freshwater water quality objective. Each of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**
Bradley Canyon Creek

LOE ID: 14385

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**

Bradley Canyon Creek

LOE ID:	14386
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**

Bradley Canyon Creek

LOE ID:	13400
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon.

	Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**

Bradley Canyon Creek

LOE ID:	13381
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**

Bradley Canyon Creek

LOE ID:	13382
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**

Bradley Canyon Creek

LOE ID:	49459
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**

Bradley Canyon Creek

LOE ID:	49483
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]

Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**

Bradley Canyon Creek

LOE ID:	48074
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 13 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**

Bradley Canyon Creek

LOE ID:	48075
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 12 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42976, Turbidity **Region 3**

Bradley Canyon Creek

LOE ID:	13385
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38023 Region 3

Bradley Canyon Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five beneficial uses are assessed. Twelve of the 44 samples exceed the water quality objectives for drinking water and recreation and 3 of the 44 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 44 samples exceed the water quality objectives for drinking water and recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38023, pH Region 3

Bradley Canyon Creek

LOE ID:	49482
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	14372
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

quality data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]

Temporal Representation: Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID: 14371

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 15

Number of Exceedances: 7

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data
Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]

Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	14370
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	14369

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	14368
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	48073
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	48072
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	48071
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	48070
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 16 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	48069
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	49449
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	49513
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	49511
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	49498
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11838
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11856
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11842

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11841
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11822
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11821
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11840
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11839
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11858
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38023, pH **Region 3**

Bradley Canyon Creek

LOE ID:	11857
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **32387** **Region 3**

Bradley Canyon Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Groundwater Loadings | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by	03/08/2016

USEPA:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 4064) and total ammonia (Decision 11210). This decision contains all of the LOEs from those decisions in addition to new LOEs. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Note that LOEs 1922 is not included in this assessment because it contains the same data and information as LOE 9866. They are functionally duplicates and are not assessed twice. Eight LOEs summarize unionized ammonia data in which 11 of the 35 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Four LOE summarizes total ammonia data and zero of the 45 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 35 samples exceeded the Basin Plan general objective for unionized ammonia set to protect aquatic life and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The Total Maximum Daily Loads for nitrogen compounds and orthophosphate for the Lower Santa Maria River Watershed and Tributaries to Oso Flaco Lake has been approved by the USEPA on March 8, 2016. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. However, it should be placed in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	14335
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia As N,

	Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	14563
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	14564
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	10104
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	9865
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	9866
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	48052
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 5/29/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	49458
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	49485
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	49514
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	48050
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	48051
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 5/29/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32387, Ammonia **Region 3**

Bradley Canyon Creek

LOE ID:	1922
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three out of seven samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data were collected at site 312BCF on Bradley Canyon Creek, in Santa Barbara County.
Temporal Representation:	Samples were collected from April 2000 to December 2000.
Environmental Conditions:	Water body is located in the Santa Maria Hydrologic Unit. The site is identified as Bradley Canyon Diversion Channel at Foxen Canyon Road (312BCF).
QAPP Information:	CCAMP, SWAMP QAPP.Samples were taken according to CCAMP protocols.
QAPP Information Reference(s):	

DECISION ID	**32915**	**Region 3**
Bradley Canyon Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant (excluding LOE 1923). LOE 11819 replaces LOE 1923. LOE 1923 erroneously showed 4 exceedances out of 7 samples. LOE 11819 correctly shows 5 exceedances out of the same 7 samples. Six of the 10 samples exceed the water quality objective for recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list and to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 10 samples exceed the water quality objective for recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Total Maximum Daily Loads for Fecal Indicator Bacteria for the Santa Maria Watershed has been approved by the USEPA on April 24, 2013. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) List because applicable water

quality standards for the pollutant are being exceeded. It should however, be placed in the Being Addressed portion of the 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32915, Fecal Coliform **Region 3**

Bradley Canyon Creek

LOE ID:	11819
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32915, Fecal Coliform **Region 3**

Bradley Canyon Creek

LOE ID:	11820
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32915, Fecal Coliform **Region 3**

Bradley Canyon Creek

LOE ID:	1923
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	There were 7 samples collected at the Foxen Canyon Road site (CCAMP, 2004). Four of these samples exceeded the 400 MPN/100 ml criteria.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Three stations were sampled.
Temporal Representation:	Sampling occurred monthly.
Environmental Conditions:	
QAPP Information:	CCAMP data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32915, Fecal Coliform **Region 3**

Bradley Canyon Creek

LOE ID:	49499
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32915, Fecal Coliform **Region 3**

Bradley Canyon Creek

LOE ID:	49512
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42308** **Region 3**

Bradley Canyon Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Nineteen lines of evidence are available in the administrative record to assess this pollutant. Nine of the 20 nitrate samples and 17 of the 28 nitrate/nitrite samples exceed the water quality objectives for the Drinking Water Beneficial Use. Nineteen of the 20 nitrate samples and 20 of the 20 nitrate/nitrite samples exceed evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 0.0 mg/L to 15.1 mg/L, exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L, and this waterbody is listed as impaired for low dissolved oxygen.
2) Water column chlorophyll a concentration ranged from 0.0 ug/L to 31.3 ug/L, at times exceeding screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). This waterbody is also listed as impaired for low dissolved oxygen.
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body is 4.23 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 91 g/m2 ash-free dry mass (AFDM). This exceeds the screening threshold for algae biomass of 60 grams/m2 (Creager, et al., 2006).
5) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 QUAL2K model (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 228 mg/m2. This exceeds the Cold water screening threshold of 150 mg/m2 and the Warm water screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the 20 nitrate samples and 17 of the 28 nitrate/nitrite samples exceed the water quality objectives for the Drinking Water Beneficial Use. Nineteen of the 20 nitrate samples and 20 of the 20 nitrate/nitrite samples exceed evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.
4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on March 8, 2016.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID: 15215

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 5 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 3/22/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	27859
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	27858
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	27857
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region

	IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	48064
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 17 of 17 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	48063
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 11 of 17 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	48062
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	17
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 17 of 17 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	48061
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 3/25/2009-4/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	48060
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [

	312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 3/25/2009-4/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	48059
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 3/25/2009-4/29/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42308, Nitrate — Region 3

Bradley Canyon Creek

LOE ID:	9881
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42308, Nitrate — Region 3

Bradley Canyon Creek

LOE ID:	14322
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	49446
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	49445
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	49497
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42308, Nitrate — Region 3

Bradley Canyon Creek

LOE ID:	49496
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42308, Nitrate — Region 3

Bradley Canyon Creek

LOE ID:	49470
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	49469
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42308, Nitrate **Region 3**

Bradley Canyon Creek

LOE ID:	27856
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/29/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37830**	**Region 3**
Bradley Canyon Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Thirteen of 44 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and 7 of the 44 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for this pollutant is set at 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of 44 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. The Total Maximum Daily Loads for nitrogen compounds and orthophosphate for the Lower Santa Maria River Watershed and Tributaries to Oso Flaco Lake has been approved by the USEPA on March 8, 2016. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water

quality standards for the pollutant are being exceeded. However, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	48067
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 8 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	14615
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15

Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	13383
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	14618
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	14617
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	48066
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	48065
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 5 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	49448
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	49447

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	48068
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 8 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	13366
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	13365
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	13367
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	49481
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	49471
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	13351
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	12615
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling

	(DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	14616
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	12599
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37830, Oxygen, Dissolved **Region 3**

Bradley Canyon Creek

LOE ID:	13384
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42899** **Region 3**

Bradley Canyon Creek

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Six LOEs summarizes sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and two additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in sediment samples. Three of the four sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Eight LOEs summarize water samples. Five water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and five additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, ten total samples are available to assess toxic effects in water samples. Seven of the ten water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 10 water samples resulted in a significant toxic to one or more test organisms and three of four sediment samples resulted in a significant toxic to one or more test organisms. These exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Total Maximum Daily Loads for Toxicity and Pesticides in the Santa Maria River Watershed has been approved by the USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. However, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23668
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected on a single day 4/20/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23648
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella

	azteca Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected on a single day 4/20/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23660
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 3/22/2005-7/26/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23661
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 3/22/2005-7/26/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23678
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23679
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23680
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23681
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23666
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]

Temporal Representation:	Data was collected on a single day 5/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	23667
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected on a single day 5/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	78416
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate sediment toxicity. Two of the two samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 312BCC-Bradley Canyon Creek.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	78417
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to evaluate water toxicity. Four of the five samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia (9/24/08, 1/20/10, 1/24/08, 3/26/08) and Pimephales promelas (1/20/10) and Selenastrum capricornutum (3/26/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. A statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 312BCC-Bradley Canyon Creek.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID:	53620
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate sediment toxicity. Two of the two samples exhibited significant toxicity to Hyalella Azteca survival and growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the

control.

Guideline Reference:

Spatial Representation: The samples were collected at 312BCC-Bradley Canyon Creek.
Temporal Representation: The samples were collected from 2007 to 2010.
Environmental Conditions:
QAPP Information: The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42899, Toxicity **Region 3**

Bradley Canyon Creek

LOE ID: 53619

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 4

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Five samples were collected to evaluate water toxicity. Four of the five samples exhibited significant toxicity. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia (9/24/08, 1/20/10, 1/24/08, 3/26/08) and Pimephales promelas (1/20/10) and Selenastrum capricornutum (3/26/08).
Data Reference: Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. A statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference: Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064

Spatial Representation: The samples were collected at 312BCC-Bradley Canyon Creek.
Temporal Representation: The samples were collected from 2007 to 2010.
Environmental Conditions:
QAPP Information: The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 37832 **Region 3**

Bradley Canyon Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 40 samples the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 40 samples the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37832, Chlorophyll-a **Region 3**

Bradley Canyon Creek

LOE ID:	49515
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-11/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37832, Chlorophyll-a **Region 3**

Bradley Canyon Creek

LOE ID:	48054
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37832, Chlorophyll-a **Region 3**

Bradley Canyon Creek

LOE ID:	14566
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37832, Chlorophyll-a **Region 3**

Bradley Canyon Creek

LOE ID:	9867
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37832, Chlorophyll-a **Region 3**

Bradley Canyon Creek

LOE ID:	9868
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 3/2/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37832, Chlorophyll-a **Region 3**

Bradley Canyon Creek

LOE ID:	48053
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-2/24/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37832, Chlorophyll-a **Region 3**

Bradley Canyon Creek

LOE ID:	14565

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37832, Chlorophyll-a **Region 3**

Bradley Canyon Creek

LOE ID:	49468
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-11/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46994** **Region 3**

Bradley Canyon Creek

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2

samples exceeded the evaluation guideline (USEPA national recommended water quality criteria) used to interpret the narrative water quality objectives for aquatic life protection. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46994, Demeton **Region 3**

Bradley Canyon Creek

LOE ID:	77365
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46916 Region 3

Bradley Canyon Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. The exceedance count does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46916, Diazinon Region 3

Bradley Canyon Creek

LOE ID:	77358
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at Culverts - 312BCC]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46916, Diazinon **Region 3**

Bradley Canyon Creek

LOE ID:	48058
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]

Temporal Representation:	Data was collected over the time period 2/13/2007-3/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46916, Diazinon **Region 3**

Bradley Canyon Creek

LOE ID:	48057
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-3/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46995** **Region 3**

Bradley Canyon Creek

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceeded the evaluation guideline (maximum acceptable toxicant concentration, USEPA, 1985) used to interpret the narrative water quality objectives for aquatic life protection. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46995, Dichlorvos **Region 3**

Bradley Canyon Creek

LOE ID:	77366
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46990** **Region 3**

Bradley Canyon Creek

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 water exceeded the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database) used to interpret the narrative water quality objectives for aquatic life protection nor did they exceed the evaluation guideline for drinking water (California Department of Health Services notification level). The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 water exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46990, Dimethoate **Region 3**

Bradley Canyon Creek

LOE ID:	77367
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46990, Dimethoate **Region 3**

Bradley Canyon Creek

LOE ID:	77359
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek - 312BCC]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46990, Dimethoate **Region 3**

Bradley Canyon Creek

LOE ID:	77360
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	46996	Region 3
Bradley Canyon Creek		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceeded the evaluation guideline (USEPA drinking water health advisory) for drinking water. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46996, Disulfoton	**Region 3**
Bradley Canyon Creek	

LOE ID:	77361
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46989** **Region 3**

Bradley Canyon Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria,1986). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria,1986) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46989, Escherichia coli (E. coli) **Region 3**

Bradley Canyon Creek

LOE ID:	49500
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46997** **Region 3**

Bradley Canyon Creek

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceeded the evaluation guideline (maximum acceptable toxicant concentration, USEPA, 1985) used to interpret the narrative water quality objectives for aquatic life protection. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46997, Ethoprop **Region 3**

Bradley Canyon Creek

LOE ID:	77368
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46991** **Region 3**

Bradley Canyon Creek

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One of the 2 samples exceeded the evaluation guideline (Palumbo et al., 2012) used to interpret the narrative water quality objectives for aquatic life protection. Zero of the 2 samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory). The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 2 samples exceeded the evaluation guideline (Palumbo et al., 2012) used to interpret the narrative water quality objectives for aquatic life protection. Zero of the 2 samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory). Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46991, Malathion **Region 3**

Bradley Canyon Creek

LOE ID:	77369
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: One of two samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46991, Malathion **Region 3**

Bradley Canyon Creek

LOE ID:	77355
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: One of two samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at Culverts - 312BCC]

Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data, following the QAPP for that program and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46991, Malathion **Region 3**

Bradley Canyon Creek

LOE ID:	77362
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46992** **Region 3**

Bradley Canyon Creek

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceeded the evaluation guideline (CDFG, 1992) used to interpret the narrative water quality objectives for aquatic life protection. Zero of the 2 samples exceed the evaluation guideline for drinking water (USEPA IRIS reference dose). The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46992, Methyl Parathion **Region 3**

Bradley Canyon Creek

LOE ID:	77363
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46992, Methyl Parathion **Region 3**

Bradley Canyon Creek

LOE ID:	77370
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46993** **Region 3**

Bradley Canyon Creek

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Conclusion:	Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceeded the evaluation guideline (USEPA Office of Pesticide Pollution Ecotoxicity Database) used to interpret the narrative water quality objectives for aquatic life protection. Zero of the 2 samples exceed the evaluation guideline for drinking water (National Academy of Sciences health advisory). The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46993, Phorate **Region 3**

Bradley Canyon Creek

LOE ID:	77356
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of two samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [

	Bradley Canyon Creek at Culverts - 312BCC]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46993, Phorate **Region 3**

Bradley Canyon Creek

LOE ID:	77371
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46993, Phorate **Region 3**

Bradley Canyon Creek

LOE ID:	77364
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at culverts - 312BCC].
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42394**	**Region 3**
Bradley Canyon Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 46 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of the 46 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in

Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42394, Temperature, water **Region 3**

Bradley Canyon Creek

LOE ID:	48076
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 6 of 19 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42394, Temperature, water **Region 3**

Bradley Canyon Creek

LOE ID:	13368
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-12/7/2000. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42394, Temperature, water **Region 3**

Bradley Canyon Creek

LOE ID:	49484
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 8/29/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42394, Temperature, water **Region 3**

Bradley Canyon Creek

LOE ID:	14387
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 6 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek at Culvert, up stream of Santa Maria River]
Temporal Representation:	Data was collected over the time period 2/21/2005-11/15/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42394, Temperature, water **Region 3**

Bradley Canyon Creek

LOE ID:	13401
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCF-Bradley Canyon diversion channel at Foxen Canyon Road]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/7/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **47397** **Region 3**

Bradley Canyon Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of two samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Zero of two samples exceed the USEPA drinking water health advisory. The for municipal beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of two samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 47397, Chlorpyrifos **Region 3**

Bradley Canyon Creek

LOE ID: 77357

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Bradley Channel to determine beneficial use support and results are as follows: Neither of the two samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [Bradley Canyon Creek at Culverts - 312BCC]
Temporal Representation:	Data was collected over the time period 2/13/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47397, Chlorpyrifos **Region 3**

Bradley Canyon Creek

LOE ID:	48055
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-3/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47397, Chlorpyrifos **Region 3**

Bradley Canyon Creek

LOE ID:	48056
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Bradley Canyon Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Bradley Canyon Creek was collected at 1 monitoring site [312BCC - Bradley Canyon Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-3/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Blosser Channel**
Water Body ID: **CAR3121003020011121135941**
Water Body Type: **River & Stream**

DECISION ID **36923** **Region 3**
Blosser Channel

Pollutant: **pH**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available to assess this pollutant. Five beneficial uses are assessed. Fifteen of the 24 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 17 of the 24 samples exceed the water quality objectives for Recreation and for Municipal and Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.
This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 24 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 17 of the 24 samples exceed the water quality objectives for Recreation and for Municipal and Domestic Supply and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**
Blosser Channel

LOE ID: 11782

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	11783
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and

	Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	11799
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	11800
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	11784
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	11801
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	11802
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	11818
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	11803
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	49428
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 6 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	49435
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	49456
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 6 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	11781
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]

Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	49438
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36923, pH **Region 3**

Blosser Channel

LOE ID:	49440
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**32519**	**Region 3**
Blosser Channel		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the section 303(d) list under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. Seven lines of evidence are available in the administrative record to assess this pollutant. However, LOE 1920 summarizes the same data as LOEs 10088 and so the samples are not double counted here. Four LOEs summarize unionized ammonia data in which 8 of 21 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarizes total ammonia data and zero of the 21 samples exceed the EPA's Lifetime Health advisory level for total

ammonia in drinking water.
The pollutant name was changed from Â‘Unionized AmmoniaÂ’ (Decision 11033) to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 4719) and total ammonia (Decision 11039). This decision contains all of the LOEs from those decisions in addition to new LOEs.
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. However, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 21 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Nutrients TMDL has been approved by the USEPA on March 8, 2016.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32519, Ammonia **Region 3**

Blosser Channel

LOE ID:	10086
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32519, Ammonia **Region 3**

Blosser Channel

LOE ID:	49422
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 5 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32519, Ammonia **Region 3**

Blosser Channel

LOE ID:	10088
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32519, Ammonia **Region 3**

Blosser Channel

LOE ID:	1920
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three of 11 data points exceed the water quality objective (CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data were collected at site 312BCD on Blosser Channel, in Santa Barbara County. This data represents only the retention pond overflow as the upstream channel was dry most of the year.
Temporal Representation:	Samples were collected from May 2000 to February 2001. All 3 exceedances of the objective were during summer months when flows were primarily from the retention basin overflow. Since 2002 a new housing development is being built at the site location and the retention basin has been drained since 2004.
Environmental Conditions:	The waterbody is located in the Santa Maria hydrologic unit, Guadalupe hydrologic area, Guadalupe hydrologic subarea. The monitoring site is located at Blosser Channel downstream of groundwater recharge ponds (312BCD). In 2000 this site was downstream of a storm water channel and the discharge from groundwater recharge ponds. As of 2003 a housing development is underway and this site will be completely converted to storm water channel after the projects completion.
QAPP Information:	CCAMP and SWAMP QAPP.Samples were taken according to CCAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32519, Ammonia **Region 3**

Blosser Channel

LOE ID:	10087
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32519, Ammonia **Region 3**

Blosser Channel

LOE ID:	49441
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 5 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32519, Ammonia **Region 3**

Blosser Channel

LOE ID:	49431

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38045**	**Region 3**
Blosser Channel		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Note, LOE

#1921 is disregarded (not included in sample and exceedance counts) because all of the data in LOE #1921 is also summarized in LOE #11764 and LOE #11764 contains one additional data point. Twelve of the 21 samples exceed the water quality objective for contact recreation (i.e. swimming).

There is sufficient justification to place it in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 21 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The TMDL for Feacl Indicator Bacteria in the Santa Maria River Watershed has been approved by the USEPA on April 24, 2013.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Place this pollutant waterbody combination it in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 38045, Fecal Coliform **Region 3**

Blosser Channel

LOE ID:	11764
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38045, Fecal Coliform **Region 3**

Blosser Channel

LOE ID:	1921
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Five of 10 samples exceed the water quality objectives (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There was one sampling site. This data represents only the retention pond overflow as the upstream channel was dry most of the year.
Temporal Representation:	There were monthly sampling events. All 3 exceedances of the objective were during summer months when flows were primarily from the retention basin overflow. Since 2002 a new housing development is being built at the site location and the retention basin has been drained (since 2004).
Environmental Conditions:	
QAPP Information:	CCAMP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38045, Fecal Coliform **Region 3**

Blosser Channel

LOE ID:	11780

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38045, Fecal Coliform **Region 3**

Blosser Channel

LOE ID:	49439
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.

Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38045, Fecal Coliform **Region 3**

Blosser Channel

LOE ID:	49436
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 6 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [

	312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	36616	Region 3
Blosser Channel		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. Two of the 21 nitrate samples and of the 10 nitrate/nitrite samples exceed the water quality objective for Drinking Water. Eighteen of the 21 nitrate samples and eight of the 10 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1)Dissolved oxygen for this site on the water body ranged from 7.10 mg/L to 16.64 mg/L. This waterbody at times exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentrations averaged 17.82 and peaked at 44.10 ug/L. The screening level for chlorophyll a is 15 ug/L.
3) Based on predicted algae biomass, the California Benthic Biomass Tool, v. 13 (Tetratech, 2007) estimated an oxygen deficit for this water body of 3.50 mg/L. The level established by Central Coast staff as providing an acceptable level of protection for Central Coast waters is a maximum of 1.25 mg/L (RWQCB NNE Technical Approach, 2009).
4) The Biomass Tool (using the revised QUAL2K model) also predicted algae biomass of 80 g/m2 ash free dry weight. CaliforniaÂ's Nutrient Numeric Endpoints (Creager, et al., 2006) established warm water threshold values of 80 grams/m2 ash-free dry weight (AFDW) for algal density, and cold water threshold values of 150 mg/ m2 60 grams/m2 AFDW for algal density.
5) The Biomass Tool (using the revised QUAL2K model) also predicted chlorophyll a concentrations of 200 mg/m2. CaliforniaÂ's Nutrient Numeric Endpoints (Creager, et al., 2006) established warm water threshold values of 200 mg/m2 for chlorophyll a for algal density, and cold water threshold values of 150 mg/ m2 for chlorophyll a for algal density.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Two of the 21 nitrate samples and of the 10 nitrate/nitrite samples exceed the water quality objective for Drinking Water. Eighteen of the 21 nitrate samples and eight of the 10 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 4. The Santa Maria River Watershed Nutrients TMDL has been approved by USEPA on 3/8/2016. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36616, Nitrate **Region 3**

Blosser Channel

LOE ID:	49424
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36616, Nitrate **Region 3**

Blosser Channel

LOE ID:	27854
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36616, Nitrate — Region 3

Blosser Channel

LOE ID:	49444
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36616, Nitrate — Region 3

Blosser Channel

LOE ID:	49443
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36616, Nitrate **Region 3**

Blosser Channel

LOE ID:	27853
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36616, Nitrate **Region 3**

Blosser Channel

LOE ID:	10103
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36616, Nitrate **Region 3**

Blosser Channel

LOE ID:	49425
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36616, Nitrate **Region 3**

Blosser Channel

LOE ID:	49433
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36616, Nitrate **Region 3**

Blosser Channel

LOE ID:	49434

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42940**	**Region 3**
Blosser Channel		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the section 303(d) list under section 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. One LOEs summarizes sediment samples. Zero sediment samples are summarized in LOEs using the

test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, one total sample is available to assess toxic effects in sediment samples. One of the one sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Eight LOEs summarize water samples. One water sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and seven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in water samples. Four of the eight water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 8 water samples resulted in significant toxic effects to one or more test organism, exceeding the water quality objective for aquatic life and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The TMDL for toxicity and pesticides in the Santa Maria River Watershed has been approved by the USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42940, Toxicity **Region 3**

Blosser Channel

LOE ID:	23654
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42940, Toxicity **Region 3**

Blosser Channel

LOE ID:	23629
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42940, Toxicity **Region 3**

Blosser Channel

LOE ID:	23655
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42940, Toxicity **Region 3**

Blosser Channel

LOE ID:	23657
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42940, Toxicity **Region 3**

Blosser Channel

LOE ID:	23651
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42940, Toxicity **Region 3**

Blosser Channel

LOE ID:	23656

Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds].
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42940, Toxicity **Region 3**

Blosser Channel

LOE ID:	53457
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 312BCDxxx.
Temporal Representation:	The samples were collected in June 2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42940, Toxicity **Region 3**

Blosser Channel

LOE ID:	53456
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects to the survival of Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Blosser Channel station 312BCD.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42940, Toxicity **Region 3**

Blosser Channel

LOE ID:	53455
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. Two of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in two samples (2/3/2009 and 3/31/2009).
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Blosser Channel - 312BCD.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46960** **Region 3**

Blosser Channel

Pollutant: **Azinphos-methyl (Guthion)**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (USEPA National Recommended Water Quality Criteria, 2009) used to interpret the narrative water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46960, Azinphos-methyl (Guthion) **Region 3**

Blosser Channel

LOE ID:	53522
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46960, Azinphos-methyl (Guthion) **Region 3**

Blosser Channel

LOE ID:	53521
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46975** **Region 3**

Blosser Channel

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Five lines of evidence are available in the administrative record to assess this pollutant. The single water sample did exceed the evaluation guideline (Fojut et al., 2012). The single sediment sample also exceeded the evaluation guideline (Amweg and Weston, 2007) and that sample resulted in a statistically significant effect (reduction in survival) to the invertebrate test organism relative to the control sample. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of one water samples and one of one sediment samples exceeded the water quality objectives for aquatic life protection but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46975, Bifenthrin **Region 3**

Blosser Channel

LOE ID:	53523
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46975, Bifenthrin **Region 3**

Blosser Channel

LOE ID:	53534
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides.

	Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46975, Bifenthrin **Region 3**

Blosser Channel

LOE ID:	53533
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46975, Bifenthrin **Region 3**

Blosser Channel

LOE ID:	53532
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46975, Bifenthrin **Region 3**

Blosser Channel

LOE ID:	53456
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects to the survival of Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Blosser Channel station 312BCD.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46983** **Region 3**

Blosser Channel

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46983, Chlordane **Region 3**

Blosser Channel

LOE ID:	53544
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46983, Chlordane **Region 3**

Blosser Channel

LOE ID:	53535
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for

	Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**42901**	**Region 3**
Blosser Channel		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 20 samples exceeds the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 20 samples exceeds the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42901, Chlorophyll-a **Region 3**

Blosser Channel

LOE ID:	49442
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-11/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42901, Chlorophyll-a **Region 3**

Blosser Channel

LOE ID:	10101
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42901, Chlorophyll-a **Region 3**

Blosser Channel

LOE ID:	10102

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42901, Chlorophyll-a **Region 3**

Blosser Channel

LOE ID:	49423
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-11/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**46978**	**Region 3**
Blosser Channel		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. The single

water sample did not exceed the evaluation guideline (Fojut et al., 2012). The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water samples and zero of 1 sediment samples exceed the water quality objectives for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46978, Cyfluthrin **Region 3**

Blosser Channel

LOE ID:	53420
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average

	concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46978, Cyfluthrin **Region 3**

Blosser Channel

LOE ID:	53419
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyfluthrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46978, Cyfluthrin — Region 3

Blosser Channel

LOE ID:	53418
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46978, Cyfluthrin — Region 3

Blosser Channel

LOE ID:	53417
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA, Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	46979	Region 3
Blosser Channel		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut et al., 2012). The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of one water samples and zero of 1 sediment samples exceed the water quality objectives for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46979, Cyhalothrin, Lambda **Region 3**

Blosser Channel

LOE ID:	53427
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46979, Cyhalothrin, Lambda **Region 3**

Blosser Channel

LOE ID:	53428
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46979, Cyhalothrin, Lambda **Region 3**

Blosser Channel

LOE ID:	53429
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are

	reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46979, Cyhalothrin, Lambda **Region 3**

Blosser Channel

LOE ID:	53426
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).

Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46977 Region 3

Blosser Channel

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut et al. 2012). The single sediment sample did exceed the evaluation guideline (Maund et al., 2002) used to protect aquatic life beneficial uses and this sample resulted in a statistically significant effects to the survival of the test organism. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one water samples but 1 of 1 sediment samples did exceed the water quality objectives for aquatic life protection but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46977, Cypermethrin Region 3

Blosser Channel

LOE ID:	53434
Pollutant:	Cypermethrin

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46977, Cypermethrin **Region 3**

Blosser Channel

LOE ID:	53456
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects to the survival of Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Blosser Channel station 312BCD.
Temporal Representation:	The samples were collected in June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46977, Cypermethrin **Region 3**

Blosser Channel

LOE ID:	53437
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]

Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46977, Cypermethrin **Region 3**

Blosser Channel

LOE ID:	53436
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46977, Cypermethrin **Region 3**

Blosser Channel

LOE ID:	53435
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46972**	**Region 3**
Blosser Channel		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objectives but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46972, DDD (Dichlorodiphenyldichloroethane) Region 3

Blosser Channel

LOE ID:	53442
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46972, DDD (Dichlorodiphenyldichloroethane) Region 3

Blosser Channel

LOE ID:	53443
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46973** **Region 3**

Blosser Channel

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single

sample did exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the water quality objectives but this does not exceed the allowable frequency listed in table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46973, DDE (Dichlorodiphenyldichloroethylene) Region 3

Blosser Channel

LOE ID:	53444
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]

Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46973, DDE (Dichlorodiphenyldichloroethylene) Region 3

Blosser Channel

LOE ID:	53445
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46974 Region 3

Blosser Channel

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46974, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Blosser Channel

LOE ID:	53450
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46974, DDT (Dichlorodiphenyltrichloroethane) Region 3

Blosser Channel

LOE ID:	53454
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46974, DDT (Dichlorodiphenyltrichloroethane) Region 3

Blosser Channel

LOE ID:	53451

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46974, DDT (Dichlorodiphenyltrichloroethane) Region 3

Blosser Channel

LOE ID:	53449
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46980**	**Region 3**
Blosser Channel		

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (maximum acceptable toxicant concentration, USEPA, 2005). The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one water samples and zero of 1 sediment samples exceed the water quality objectives for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46980, Deltamethrin **Region 3**

Blosser Channel

LOE ID:	53462
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46980, Deltamethrin **Region 3**

Blosser Channel

LOE ID:	53463
Pollutant:	Deltamethrin

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46980, Deltamethrin **Region 3**

Blosser Channel

LOE ID:	53453
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46980, Deltamethrin **Region 3**

Blosser Channel

LOE ID:	53452
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The

	LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46961 Region 3
Blosser Channel

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (USEPA National Recommended Water Quality Criteria, 2009) used to interpret the narrative water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46961, Demeton Region 3
Blosser Channel

LOE ID:	53465
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46961, Demeton **Region 3**

Blosser Channel

LOE ID:	53464
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46962 Region 3

Blosser Channel

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline used to interpret the narrative water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46962, Dichlorvos Region 3

Blosser Channel

LOE ID:	53481
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46962, Dichlorvos **Region 3**

Blosser Channel

LOE ID:	53486
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46984**	**Region 3**
Blosser Channel		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46984, Dieldrin — Region 3

Blosser Channel

LOE ID:	53487
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46984, Dieldrin — Region 3

Blosser Channel

LOE ID:	53488
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	46963	Region 3
Blosser Channel		

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database, 2011) used to interpret the narrative water quality objective or the evaluation guideline (California Department of Health Services notification level, 2007) used to protect drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46963, Dimethoate **Region 3**

Blosser Channel

LOE ID:	53494
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46963, Dimethoate **Region 3**

Blosser Channel

LOE ID:	53495
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46963, Dimethoate **Region 3**

Blosser Channel

LOE ID:	53489
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.

Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46988 Region 3

Blosser Channel

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (USEPA drinking water health advisory level) used to interpret the narrative water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) List because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46988, Disulfoton Region 3

Blosser Channel

LOE ID:	53496
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Disulfoton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46985** **Region 3**

Blosser Channel

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46985, Endrin **Region 3**

Blosser Channel

LOE ID:	53503
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46985, Endrin **Region 3**

Blosser Channel

LOE ID:	53497
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46966**	**Region 3**
Blosser Channel		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Four out of 10 samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Although this pollutant is not exceeding the allowable frequency listed in table 3.2 of the Listing Policy, it is addressed in the TMDL for fecal indicator Bacteria in the Santa Maria River Watershed approved by EPA on April 24, 2013.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four out of 10 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46966, Escherichia coli (E. coli) **Region 3**

Blosser Channel

LOE ID:	49437
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 4 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46981 **Region 3**

Blosser Channel

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (USEPA Office of Pesticide Programs Ecotoxicity database). The single sediment sample did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one water samples and zero of 1 sediment samples exceed the water quality objectives for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46981, Esfenvalerate/Fenvalerate — Region 3

Blosser Channel

LOE ID:	53512
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46981, Esfenvalerate/Fenvalerate **Region 3**

Blosser Channel

LOE ID:	53505
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46981, Esfenvalerate/Fenvalerate **Region 3**

Blosser Channel

LOE ID:	53504
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46981, Esfenvalerate/Fenvalerate **Region 3**

Blosser Channel

LOE ID:	53506
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46964**	**Region 3**
Blosser Channel		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (maximum acceptable toxicant concentration - USEPA, 2011) used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46964, Ethoprop **Region 3**

Blosser Channel

LOE ID:	53524
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46964, Ethoprop **Region 3**

Blosser Channel

LOE ID:	53515
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46986** **Region 3**

Blosser Channel

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46986, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Blosser Channel

LOE ID:	53525
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46986, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Blosser Channel

LOE ID:	53526
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46967** **Region 3**

Blosser Channel

Pollutant: **Malathion**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (UCDavis, 2012) used to interpret the narrative water quality objective for aquatic life protection nor did it exceed the USEPA drinking water health advisory concentration set to protect drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46967, Malathion **Region 3**

Blosser Channel

LOE ID:	53537
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46967, Malathion **Region 3**

Blosser Channel

LOE ID:	53536
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46967, Malathion **Region 3**

Blosser Channel

LOE ID:	53527
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46969** **Region 3**

Blosser Channel

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (maximum acceptable toxicant concentration Â–

USEPA 1985) used to interpret the narrative water quality objective for aquatic life protection nor did it exceed the USEPA IRIS reference dose for drinking water.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46969, Methidathion **Region 3**

Blosser Channel

LOE ID:	53548
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section

	F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46969, Methidathion **Region 3**

Blosser Channel

LOE ID:	53539
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46969, Methidathion **Region 3**

Blosser Channel

LOE ID:	53538
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46982** **Region 3**

Blosser Channel

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result.

Five lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (CDFG, 1992) used to protect aquatic life beneficial uses or the evaluation guideline for drinking water (USEPA IRIS reference dose). The single sediment sample did not exceed the evaluation guideline (Ding et al., 2011) used to protect aquatic life beneficial uses. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the water samples and zero of the sediment samples exceed the water quality objectives for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46982, Methyl Parathion **Region 3**

Blosser Channel

LOE ID:	53422
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.

Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46982, Methyl Parathion **Region 3**

Blosser Channel

LOE ID:	53421
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46982, Methyl Parathion **Region 3**

Blosser Channel

LOE ID:	53551
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46982, Methyl Parathion **Region 3**

Blosser Channel

LOE ID:	53550
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46982, Methyl Parathion **Region 3**

Blosser Channel

LOE ID:	53549
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 36631 Region 3

Blosser Channel

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two of 24 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, one of the 24 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Therefore, the use support rating for this pollutant is set at Insufficient information. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 24 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, one of the 24 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved Region 3

Blosser Channel

LOE ID:	13621

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	13620
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	13601
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	13600
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	13347
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	13599
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	49455
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	49426
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	49427
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	13598
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	13622
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36631, Oxygen, Dissolved **Region 3**

Blosser Channel

LOE ID:	49454

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**46987**	**Region 3**
Blosser Channel		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46987, PCBs (Polychlorinated biphenyls) **Region 3**

Blosser Channel

LOE ID:	53430
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46987, PCBs (Polychlorinated biphenyls) **Region 3**

Blosser Channel

LOE ID:	53425
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46965** **Region 3**

Blosser Channel

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Recommended Water Quality Criteria-USEPA, 2006) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46965, Parathion **Region 3**

Blosser Channel

LOE ID:	53424
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection

	Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46965, Parathion **Region 3**

Blosser Channel

LOE ID:	53423
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46976** **Region 3**

Blosser Channel

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Fojut et al. 2012). The single sediment sample did exceed the evaluation guideline (Amweg and Weston, 2007) used to protect aquatic life beneficial uses. However, these sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of one water samples but 1 of 1 sediment samples did exceed the water quality objectives for aquatic life protection but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46976, Permethrin, total **Region 3**

Blosser Channel

LOE ID:	53432
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46976, Permethrin, total **Region 3**

Blosser Channel

LOE ID:	53438
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Permethrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46976, Permethrin, total **Region 3**

Blosser Channel

LOE ID:	53431
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46976, Permethrin, total **Region 3**

Blosser Channel

LOE ID:	53433
Pollutant:	Permethrin, total

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Permethrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46968** **Region 3**

Blosser Channel

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection nor did it exceed the National Academy of Sciences health advisory level for drinking water.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46968, Phorate **Region 3**

Blosser Channel

LOE ID:	53440
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46968, Phorate **Region 3**

Blosser Channel

LOE ID:	53441
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46968, Phorate **Region 3**

Blosser Channel

LOE ID:	53439
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46970**	**Region 3**
Blosser Channel		

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection nor did it exceed the USEPA IRIS reference dose for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46970, Phosmet **Region 3**

Blosser Channel

LOE ID:	53448
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46970, Phosmet **Region 3**

Blosser Channel

LOE ID:	53447
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46970, Phosmet **Region 3**

Blosser Channel

LOE ID:	53446
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 2/3/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 36833 Region 3

Blosser Channel

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Six of the 24 samples exceed the evaluation guideline (Moyle 1976) set to protect aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 24 samples exceed the evaluation guideline (Moyle 1976) set to protect aquatic life and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36833, Temperature, water Region 3

Blosser Channel

LOE ID:	13619
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 5/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36833, Temperature, water **Region 3**

Blosser Channel

LOE ID:	49430
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36833, Temperature, water **Region 3**

Blosser Channel

LOE ID:	13350
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42902 Region 3

Blosser Channel

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 18 samples exceed the evaluation guidelines (Sigler et al. 1984) used to interpret the Cold Freshwater Habitat water quality objective and (Shoup and Wahl 2009) used to interpret the Warm Freshwater Habitat water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 18 samples exceed the evaluation guidelines and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42902, Turbidity Region 3

Blosser Channel

LOE ID:	13602
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 9/6/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42902, Turbidity **Region 3**

Blosser Channel

LOE ID:	13348
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42902, Turbidity **Region 3**

Blosser Channel

LOE ID:	49457
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 4 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42902, Turbidity **Region 3**

Blosser Channel

LOE ID:	49429
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blosser Channel to determine beneficial use support and results are as follows: 4 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/4/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42902, Turbidity **Region 3**

Blosser Channel

LOE ID:	13618
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Blosser Channel to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 9/6/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42902, Turbidity **Region 3**

Blosser Channel

LOE ID:	13349
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42938** **Region 3**

Blosser Channel

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Ten lines of evidence are available in the administrative record to assess this pollutant. Three of three samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Zero of three samples exceed the USEPA drinking water health advisory. The single sediment sample exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007). The single sediment samples (pore water) exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. For the municipal beneficial use and for the sediment samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of three samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	53456
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects to the survival of Hyalella azteca was observed on 6/10/2009.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at Blosser Channel station 312BCD.
Temporal Representation:	The samples were collected in June of 2009.

Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. No QAPP was provided but data submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	53558
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	53559
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	53557
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorpyrifos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a

	non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	53556
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos. Four additional samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier

et al., 2005).

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	53547
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos. Four additional samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	53546
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	53545
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.

Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	16221
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42938, Chlorpyrifos **Region 3**

Blosser Channel

LOE ID:	16222
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42905	Region 3
Blosser Channel		

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2016
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Seven lines of evidence are available in the administrative record to assess this pollutant. Three of 7 water samples exceed the Evaluation Guideline (Sipmann and Finlayson, 2000) applied to protect for aquatic life beneficial uses. Zero of six water samples exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). The single sediment sample (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of 7 water samples exceed the Evaluation Guideline (Sipmann and Finlayson, 2000) applied to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Santa Maria Watershed toxicity and pesticides TMDL has been approved by USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42905, Diazinon **Region 3**

Blosser Channel

LOE ID:	16625
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42905, Diazinon **Region 3**

Blosser Channel

LOE ID:	16612
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Blosser Channel to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [312BCD-Blosser Channel d/s of groundwater recharge ponds]
Temporal Representation:	Data was collected on a single day 2/27/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42905, Diazinon **Region 3**

Blosser Channel

LOE ID:	53473
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42905, Diazinon **Region 3**

Blosser Channel

LOE ID:	53478
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42905, Diazinon **Region 3**

Blosser Channel

LOE ID:	53480
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42905, Diazinon **Region 3**

Blosser Channel

LOE ID:	53470

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42905, Diazinon **Region 3**

Blosser Channel

LOE ID:	53471
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42905, Diazinon **Region 3**

Blosser Channel

LOE ID:	53472
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42905, Diazinon **Region 3**

Blosser Channel

LOE ID:	53479
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Blosser Channel to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blosser Channel was collected at 1 monitoring site [Blosser Channel - 312BCD]
Temporal Representation:	Data was collected on a single day 6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Nipomo Creek**
Water Body ID: **CAR3121001120011129124911**
Water Body Type: **River & Stream**

DECISION ID	41450	Region 3
Nipomo Creek		

Pollutant: **Toxicity**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant in water samples. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location.

Two samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). Although the LOEs (#23701 and #23967) state that two of the two samples were toxic to the plant (algal) test organisms (meaning the sample water resulted in a significant decrease in cell density compared to the laboratory control), one of those samples should not have been counted as an exceedance because the specific conductivity of the sample was above the tolerance level of the test organism. The SWAMP Toxicity Work Group memo, dated July 8, 2013, states the following: For "Selenastrum capricornutum [the algal test organism] Â– Include appropriate controls when sample conductivities exceed 1500 uS/cm. If conductivity exceeds 3000 uS/cm, use alternate species or forego testing." In the sample collected from station 312NIP on 2-26-2007, the specific conductivity measured over 1500 uS/cm but alternate controls were not used to calculate the statistical endpoint for the test. Therefore, this sample does not meet the quality control requirements of the SWAMP program or of the Listing Policy.

Only one of the two samples was toxic to the plant (algal) test organisms (exhibited a significant decrease in cell density compared to the laboratory control), and exceed the narrative General Objective for toxicity, set to protect for aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Some of the previous data used in the decision did not meet the quality control requirements of the SWAMP program. This water segment - pollutant combination should not have been added to the CWA 303(d) List in 2010.
4. One of the two samples (tested for toxicity to plants), exceed the narrative General Objective for toxicity but this does not exceed the allowable frequency listed in Table 3.1 or 4.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded. The previous decision to add this segment to the List was based partly on faulty data.

Line of Evidence (LOE) for Decision ID 41450, Toxicity **Region 3**

Nipomo Creek

LOE ID:	23967
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41450, Toxicity **Region 3**

Nipomo Creek

LOE ID:	23957
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41450, Toxicity **Region 3**

Nipomo Creek

LOE ID:	23958
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41450, Toxicity **Region 3**

Nipomo Creek

LOE ID:	23701
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 2 of 2

samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference: Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.

Guideline Reference: Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation: Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]

Temporal Representation: Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41450, Toxicity **Region 3**

Nipomo Creek

LOE ID: 23700

Pollutant: Vertebrate Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference: Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41450, Toxicity **Region 3**

Nipomo Creek

LOE ID:	23699
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**32514**	**Region 3**
Nipomo Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Forty of 57 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 8 of 35 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty of 57 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 8 of 35 samples exceed the water quality objective for non-contact recreation. Both of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2016. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32514, Fecal Coliform — Region 3

Nipomo Creek

LOE ID:	51146
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 4 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32514, Fecal Coliform — Region 3

Nipomo Creek

LOE ID:	51149
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32514, Fecal Coliform **Region 3**

Nipomo Creek

LOE ID:	10710
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 18 of 25 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period

	exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32514, Fecal Coliform **Region 3**

Nipomo Creek

LOE ID:	1918
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Twenty-five bacteria samples were collected with 18 samples (72%) exceeding the water quality objective (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There were two sampling sites.
Temporal Representation:	There were monthly sampling events.
Environmental Conditions:	Data age = 1-2 years old.
QAPP Information:	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32514, Fecal Coliform **Region 3**

Nipomo Creek

LOE ID:	11789
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 7 of 25 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42372	Region 3
Nipomo Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 25 nitrate samples and 40 of the 50 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Twenty-three of the 25 nitrate samples 31 of the 33 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 5.31 to 15.58 mg/L, exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L, and the upper screening threshold of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentration peaked at 22.5 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 1.86 to 4.18 mg/L. These exceed the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging from 43 to 93 g/m2 AFDW. The upper prediction exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging from 111 to 233 mg/m2. The upper prediction exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of the 25 nitrate samples and 40 of the 50 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Twenty-three of the 25 nitrate samples 31 of the 33 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment.
4. The Santa Maria Watershed Nutrient TMDL has been approved by USEPA on 03/08/2016.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42372, Nitrate **Region 3**

Nipomo Creek

LOE ID:	27831
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26

Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street].
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42372, Nitrate **Region 3**

Nipomo Creek

LOE ID:	9626
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42372, Nitrate **Region 3**

Nipomo Creek

LOE ID:	27832
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Santa Maria (SantaMaria)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street].
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42372, Nitrate **Region 3**

Nipomo Creek

LOE ID:	51091
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 7 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-

	Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42372, Nitrate **Region 3**

Nipomo Creek

LOE ID:	51092
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 6 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIT-Nipomo Creek at Tefft Street, 312NIP-Nipomo Creek at Highway 166]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42372, Nitrate — Region 3

Nipomo Creek

LOE ID:	51130
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42372, Nitrate — Region 3

Nipomo Creek

LOE ID:	51131
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the

	criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIT-Nipomo Creek at Tefft Street, 312NIP-Nipomo Creek at Highway 166]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42372, Nitrate **Region 3**

Nipomo Creek

LOE ID:	51167
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 7 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42372, Nitrate **Region 3**

Nipomo Creek

LOE ID:	51168
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 6 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIT-Nipomo Creek at Tefft Street, 312NIP-Nipomo Creek at Highway 166]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41799	Region 3
Nipomo Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which one of the 34 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 36 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.one of the 34 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 36 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41799, Ammonia	**Region 3**
Nipomo Creek	

LOE ID:	9858
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41799, Ammonia **Region 3**

Nipomo Creek

LOE ID:	9859
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street].
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41799, Ammonia **Region 3**

Nipomo Creek

LOE ID:	9860
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street].
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41799, Ammonia **Region 3**

Nipomo Creek

LOE ID:	51165
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41799, Ammonia **Region 3**

Nipomo Creek

LOE ID:	51089
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41799, Ammonia **Region 3**

Nipomo Creek

LOE ID:	51128
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41641 Region 3

Nipomo Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 36 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 36 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41641, Chlorophyll-a Region 3

Nipomo Creek

LOE ID:	51090
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41641, Chlorophyll-a **Region 3**

Nipomo Creek

LOE ID:	51166
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.

Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41641, Chlorophyll-a **Region 3**

Nipomo Creek

LOE ID:	9624
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41641, Chlorophyll-a **Region 3**

Nipomo Creek

LOE ID:	9625
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41363**	**Region 3**
Nipomo Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Five of the 42 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and zero of the 42 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 42 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and zero of the 42 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	13370
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 7 of 26 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	13369
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 7 of 26 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	13387
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	13355
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	13356
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	13389
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	13388
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	13390
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	50884
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	51108
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	50883
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41363, Oxygen, Dissolved **Region 3**

Nipomo Creek

LOE ID:	51109
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41378** **Region 3**

Nipomo Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Three of the 26 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and three of the 26 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 26 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41378, Turbidity **Region 3**

Nipomo Creek

LOE ID:	50886
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41378, Turbidity **Region 3**

Nipomo Creek

LOE ID:	51111
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41378, Turbidity **Region 3**

Nipomo Creek

LOE ID:	13386
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 4/10/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41378, Turbidity **Region 3**

Nipomo Creek

LOE ID:	13372
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 4/10/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41378, Turbidity **Region 3**

Nipomo Creek

LOE ID:	13407
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]

Temporal Representation:	Data was collected over the time period 6/30/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41378, Turbidity **Region 3**

Nipomo Creek

LOE ID:	13406
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 6/30/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41172** **Region 3**

Nipomo Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 40 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and one of the 40 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 40 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and one of the 40 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	11826
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation: Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID: 11825

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 5
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation: Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID: 11824

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	11807
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	11806
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	11823
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	11827
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	11804
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	11805
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	11808
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	50885
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	51150
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]

Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	51110
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	51132
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41172, pH **Region 3**

Nipomo Creek

LOE ID:	51148
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]

Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41325 Region 3

Nipomo Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Eight of the 42 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This evaluation guideline is specific to steelhead trout and the PICES database (programmable information system for management and analysis of aquatic species range data in California) lists steelhead trout as a native species for Nipomo Creek. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 42 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41325, Temperature, water Region 3

Nipomo Creek

LOE ID:	13405
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 6/29/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41325, Temperature, water **Region 3**

Nipomo Creek

LOE ID:	13371
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Nipomo Creek to determine beneficial use support and results are as follows: 8 of 26 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/11/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41325, Temperature, water **Region 3**

Nipomo Creek

LOE ID:	51112
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47349	Region 3
Nipomo Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Six of 10 samples exceed the evaluation set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 10 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2013. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47349, Escherichia coli (E. coli)	**Region 3**
Nipomo Creek	

LOE ID:	51147
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Nipomo Creek to determine beneficial use support and results are as follows: 6 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected over the time period 1/30/2007-1/15/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41643	Region 3
Nipomo Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the one samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use the single non-detect sample in the total count because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the one samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41643, Chlorpyrifos **Region 3**

Nipomo Creek

LOE ID:	16205
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41643, Chlorpyrifos **Region 3**

Nipomo Creek

LOE ID:	16206
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41644** **Region 3**

Nipomo Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41644, Diazinon **Region 3**

Nipomo Creek

LOE ID:	16871
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41644, Diazinon **Region 3**

Nipomo Creek

LOE ID:	16872
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Nipomo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Nipomo Creek was collected at 2 monitoring sites [312NIP-Nipomo Creek at Highway 166, 312NIT-Nipomo Creek at Tefft Street]
Temporal Representation:	Data was collected on a single day 2/26/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Los Berros Creek**
Water Body ID: **CAR3103102319990304143314**
Water Body Type: **River & Stream**

DECISION ID	41514	Region 3
Los Berros Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Atmospheric Deposition | Crop-Related Sources | Grazing-Related Sources | Natural Sources | Urban Runoff--Non-industrial Permitted
TMDL Name:	Los Berros Creek Nitrate
TMDL Project Code:	1009
Date TMDL Approved by USEPA:	06/11/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 8 nitrate samples exceed the water quality objective for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. Zero of the 10 nitrate/nitrite samples exceed the water quality objective for the Agricultural Supply beneficial use. Ten of the 22 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Ten of the 10 nitrate/nitrite samples exceed the water quality objectives for Cold Freshwater Habitat. However, the Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing based on the 1.0 mg/L evaluation guideline for Cold and Warm Freshwater Habitat. The measured dissolved oxygen and chlorophyll results do not indicate eutrophic conditions and although the modeled data indicate nitrate concentrations put this water segment at risk for bio-stimulation we do not recommend it be listed as impaired for Cold Freshwater Habitat beneficial use. Therefore the use rating for the Cold Freshwater Habitat use is set to insufficient information.

1) Dissolved oxygen for this water body ranged from 6.28 mg/L to 12.39 mg/L, rarely exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and never exceeding the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentration peaked at 90.93, but this was the only sample that exceeded the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 2.93 mg/L to 4.95 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 60 g/m2 ash-free dry weight (AFDW) to 107 g/m2 AFDW. This is at or exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging

at sites from 150 mg/m2 to 266 mg/m2, at one site exceeding the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 22 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Los Berros Creek TMDL for Nitrates has been approved by USEPA on 06/11/2012.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41514, Nitrate **Region 3**

Los Berros Creek

LOE ID:	15262
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41514, Nitrate **Region 3**

Los Berros Creek

LOE ID:	9918
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41514, Nitrate **Region 3**

Los Berros Creek

LOE ID:	9917
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41514, Nitrate **Region 3**

Los Berros Creek

LOE ID:	48344
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to

	determine beneficial use support and results are as follows: 10 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41514, Nitrate **Region 3**

Los Berros Creek

LOE ID:	48345
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41514, Nitrate **Region 3**

Los Berros Creek

LOE ID:	48343
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	42085	Region 3
Los Berros Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Three LOEs summarize unionized ammonia data in which zero of the 25 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 31 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 31 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42085, Ammonia	**Region 3**
Los Berros Creek	

LOE ID:	48340
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 2/27/2008-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42085, Ammonia **Region 3**

Los Berros Creek

LOE ID:	9902
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42085, Ammonia **Region 3**

Los Berros Creek

LOE ID:	14612
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42085, Ammonia **Region 3**

Los Berros Creek

LOE ID:	48339
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-4/28/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42085, Ammonia **Region 3**

Los Berros Creek

LOE ID:	9901
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42085, Ammonia **Region 3**

Los Berros Creek

LOE ID:	15249
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41436** **Region 3**

Los Berros Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One of the 30 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 30 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41436, Chlorophyll-a **Region 3**

Los Berros Creek

LOE ID:	12566
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41436, Chlorophyll-a **Region 3**

Los Berros Creek

LOE ID:	48341
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41436, Chlorophyll-a **Region 3**

Los Berros Creek

LOE ID:	14613
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42082**	**Region 3**
Los Berros Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Three of the 30 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 30 samples exceeded the water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42082, Oxygen, Dissolved **Region 3**

Los Berros Creek

LOE ID:	48347
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42082, Oxygen, Dissolved **Region 3**

Los Berros Creek

LOE ID:	48346
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42082, Oxygen, Dissolved **Region 3**

Los Berros Creek

LOE ID:	12568
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42082, Oxygen, Dissolved **Region 3**

Los Berros Creek

LOE ID:	14614
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42082, Oxygen, Dissolved **Region 3**

Los Berros Creek

LOE ID:	14627
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42082, Oxygen, Dissolved **Region 3**

Los Berros Creek

LOE ID:	12567
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42121**	**Region 3**
Los Berros Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 18 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 18 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42121, Specific Conductivity **Region 3**

Los Berros Creek

LOE ID:	10787
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42121, Specific Conductivity **Region 3**

Los Berros Creek

LOE ID:	48342
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **42076** **Region 3**

Los Berros Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 31 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 31 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42076, Temperature, water **Region 3**

Los Berros Creek

LOE ID:	12584
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [

	310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42076, Temperature, water **Region 3**

Los Berros Creek

LOE ID:	48366
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-4/28/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42076, Temperature, water **Region 3**

Los Berros Creek

LOE ID:	14695
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	44162	Region 3
Los Berros Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and two additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in sediment samples. One of the three sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Four LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and three additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess toxic effects in water samples. One of the seven water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

When the sample count is summed, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 3 sediment samples and 1 of the 7 water samples resulted in a significant toxic effect to one or more test organisms and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 44162, Toxicity **Region 3**

Los Berros Creek

LOE ID:	24180
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are

	met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44162, Toxicity **Region 3**

Los Berros Creek

LOE ID:	24181
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44162, Toxicity **Region 3**

Los Berros Creek

LOE ID:	24172
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44162, Toxicity **Region 3**

Los Berros Creek

LOE ID:	24170
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44162, Toxicity **Region 3**

Los Berros Creek

LOE ID:	54797
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. One of the three samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia (1/24/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 310LBC-Los Berros Creek.
Temporal Representation:	The samples were collected in 2007 and 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44162, Toxicity **Region 3**

Los Berros Creek

LOE ID:	54796
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate sediment toxicity. One of the two samples exhibited significant toxicity to Hyalella Azteca growth and survival.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 310LBC-Los Berros Creek.
Temporal Representation:	The samples were collected in April 2007 and 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **41515** **Region 3**

Los Berros Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. [NUMBER] lines of evidence are available in the administrative record to assess this pollutant. Two of the 29 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984)

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41515, Turbidity **Region 3**

Los Berros Creek

LOE ID:	12583
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41515, Turbidity **Region 3**

Los Berros Creek

LOE ID:	48365
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-4/28/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41515, Turbidity **Region 3**

Los Berros Creek

LOE ID:	14646
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41565**	**Region 3**
Los Berros Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 samples exceed the water quality objectives for Agricultural Supply, Cold Freshwater Habitats, Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 30 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	14630
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	14628
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	14644
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	14631
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	48348
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	48349
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	48350
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	48351
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	10788
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	48352
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	10807
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]

Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	14629
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310LBC - Los Berros Creek at Century]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	10804

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	10805
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41565, pH **Region 3**

Los Berros Creek

LOE ID:	10806
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41497 Region 3

Los Berros Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41497, Boron Region 3

Los Berros Creek

LOE ID:	9903
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Los Berros Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-5/7/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42137**	**Region 3**
Los Berros Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 8 samples exceed the water quality objective for Water Contact Recreation. None of the 8 samples exceed the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 8 samples exceed the water quality objective for Water Contact Recreation. None of the 8 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42137, Fecal Coliform **Region 3**

Los Berros Creek

LOE ID:	10785
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42137, Fecal Coliform **Region 3**

Los Berros Creek

LOE ID:	10786
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41536**	**Region 3**
Los Berros Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. All five samples exceeded the water

quality objective for Agricultural Supply and this supports rejection of the null hypothesis.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All five samples exceeded the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41536, Chloride **Region 3**

Los Berros Creek

LOE ID:	9916
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-5/7/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42075** **Region 3**

Los Berros Creek

Pollutant:	**Sodium**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. All five samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All five samples exceed the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42075, Sodium **Region 3**

Los Berros Creek

LOE ID:	9919
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Los Berros Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Berros Creek was collected at 1 monitoring site [310BER-Los Berros Creek at Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-5/7/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arroyo Grande Creek (below Lopez Lake)**
Water Body ID: **CAR3103101419980804113947**
Water Body Type: **River & Stream**

DECISION ID **36315** **Region 3**
Arroyo Grande Creek (below Lopez Lake)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-three of the 90 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-three of the 90 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36315, Escherichia coli (E. coli) **Region 3**
Arroyo Grande Creek (below Lopez Lake)

LOE ID: 49109

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	31
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 13 of 31 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36315, Escherichia coli (E. coli) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10769
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 11 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36315, Escherichia coli (E. coli) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10770
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36315, Escherichia coli (E. coli) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49110
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 9 of 34 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36935 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Three of the 169 samples exceed the water quality objective for no-contact recreation and 67 of 169 samples exceed the water quality objective for no-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty-seven of 169 samples exceed the water quality objective for no-contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36935, Fecal Coliform **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49114
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36935, Fecal Coliform **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	11006
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	59
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 59 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36935, Fecal Coliform **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49107
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	31
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 12 of 31 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36935, Fecal Coliform **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	11005
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	28
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 28 of 59 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36935, Fecal Coliform **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49113
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	31
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 2 of 31 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36935, Fecal Coliform **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49108
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 13 of 34 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36935, Fecal Coliform **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10930
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	45
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 14 of 45 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36935, Fecal Coliform **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10931
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36155 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Twelve LOEs summarize unionized ammonia data and two aquatic life beneficial uses. Six LOEs summarize total ammonia data but using two different pollutant names: Nitrogen, ammonia (Total Ammonia) and Ammonia as Nitrogen. These total ammonia pollutant names are interchangeable and so the sample and exceedance counts for these two names are summed. Two of 200 samples exceed the Basin Plan general objective to protect aquatic life. None of the 221 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This decision replaces the two previously approved decisions for each of the pollutants unionized ammonia (Decision 22673) and total ammonia (Decision 22666) and contains all of the LOEs from those decisions in addition to new LOEs. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 200 samples exceed the Basin Plan general objective to protect aquatic life. None of the 221 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9872
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10107
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9886
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9885
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49347
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14731
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15265
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10108
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14732
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49330
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49100
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Ammonia As N, Total.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49099
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48271
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 4/12/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10106

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49123
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49124
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48269
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36155, Ammonia **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48270
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 4/12/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 36270 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceeded the water quality objective and this sample size is insufficient to

determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed for application of table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The sample did not exceed the Evaluation Guideline, but the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

Line of Evidence (LOE) for Decision ID 36270, Arsenic **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15790
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36270, Arsenic **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15804

Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36270, Arsenic **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53235
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36270, Arsenic **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53236
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46620 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 2 samples exceeded the water quality objective . Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceeded the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	

Line of Evidence (LOE) for Decision ID 46620, Azinphos-methyl (Guthion) Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53238
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46620, Azinphos-methyl (Guthion) Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53237
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46622 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46622, Bifenthrin Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53250
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46622, Bifenthrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53251
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36566 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 138 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 138 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36566, Boron Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49290

Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36566, Boron **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49273
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36566, Boron **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9869
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36566, Boron **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9887
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 50 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36453 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the two samples exceed the water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed for application of table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The single sample exceeded the Evaluation Guideline, but the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

Line of Evidence (LOE) for Decision ID 36453, Cadmium — Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15584
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36453, Cadmium **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15583
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36453, Cadmium **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53259
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36453, Cadmium **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53252
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46623** **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46623, Chlordane **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53261
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46623, Chlordane **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53260
Pollutant:	Chlordane

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46625 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 64 samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and the results are as follows: Four and a half years of data from station 310ARG are summarized in LOE 49117 and one of the five annual means exceed the site specific objective. One year of data from two station (310AGF and 310AGB) are

summarized in LOE 49118 and neither of the two annual means exceed the site specific water quality objective. Therefore, one of the seven annual means exceeds the site specific water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the seven annual means exceeds the site specific water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46625, Chloride **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49117
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 12 of 30 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46625, Chloride **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49118
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 3 of 34 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41557 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the

Conclusion:	Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. One of the 209 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.One of the 209 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9900
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9888
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12547
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12548
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12726
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12727
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14747
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14746
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49125
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48028
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48029
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49126
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49348
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41557, Chlorophyll-a **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49349
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41534	Region 3
Arroyo Grande Creek (below Lopez Lake)		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Eleven lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Zero of the two samples exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). Two of two sediment samples (pore water) exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Each sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). Two sediment samples (pore water) exceeded the evaluation guideline; however, pore water results will not be the sole basis for any decision. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos	**Region 3**
Arroyo Grande Creek (below Lopez Lake)	

LOE ID:	48030
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15650
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	47687
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to

	significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	47652
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	47702
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande at Fair Oaks Bridge - 310AGFxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48031
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	47732
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore

	water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande at Fair Oaks Bridge - 310AGFxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15649
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53276
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53275
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41534, Chlorpyrifos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53082
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 36399 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 2 samples exceeded the water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed for application of table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The single sample did not exceed the Evaluation Guideline, and the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

Line of Evidence (LOE) for Decision ID 36399, Chromium Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53083
Pollutant:	Chromium

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36399, Chromium **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53084
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36399, Chromium **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16026
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36399, Chromium **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16025
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36372 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed for application of table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

Line of Evidence (LOE) for Decision ID 36372, Copper **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15956
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36372, Copper **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15943
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36372, Copper **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53150
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36372, Copper **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53085
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46624 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46624, Cyfluthrin — Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53151
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46624, Cyfluthrin — Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53152
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46626** **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46626, Cyhalothrin, Lambda **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53159
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46626, Cyhalothrin, Lambda **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53153

Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46627 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.
This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46627, Cypermethrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53160
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46627, Cypermethrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53161
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53604 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53604, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53168
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53604, DDD (Dichlorodiphenyldichloroethane) Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53162
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53605	Region 3
Arroyo Grande Creek (below Lopez Lake)		

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53605, DDE (Dichlorodiphenyldichloroethylene)	**Region 3**
Arroyo Grande Creek (below Lopez Lake)	

LOE ID:	53170
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53605, DDE (Dichlorodiphenyldichloroethylene) Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53169
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46628 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46628, DDT (Dichlorodiphenyltrichloroethane) Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53178
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46628, DDT (Dichlorodiphenyltrichloroethane) Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53138
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46628, DDT (Dichlorodiphenyltrichloroethane) Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53137
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46628, DDT (Dichlorodiphenyltrichloroethane) Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53171
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46629 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46629, Deltamethrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53179
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).

Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46629, Deltamethrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53180
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46630 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46630, Demeton — Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53182
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.

Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46630, Demeton **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53181
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 41545 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Thirteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 water samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of two samples exceed the USEPA drinking water health advisory. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). Zero of 2 sediment samples (pore water) exceeded the water quality objectives for aquatic life uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded the evaluation guidelines (Finlayson, 2004), (Ding et al. 2011), (USEPA health advisory) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53190
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53189
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50

	11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53193
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	47643
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande at Fair Oaks Bridge - 310AGFxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	47667
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	47683
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	47696
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande at Fair Oaks Bridge - 310AGFxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16822
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48176
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16836
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41545, Diazinon **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48175
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46631 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46631, Dichlorvos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53199
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of

	Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46631, Dichlorvos **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53200
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 41555 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a one line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective. and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41555, Dieldrin — Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53201
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41555, Dieldrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53202
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41555, Dieldrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16648
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41555, Dieldrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16647
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 46632 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46632, Dimethoate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53211
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46632, Dimethoate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53212
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46632, Dimethoate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53210
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at

	1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46633 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46633, Disulfoton Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53215
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 41556 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. TheNeither of the samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 41556, Endrin Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53227
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41556, Endrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53226
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41556, Endrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16468
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41556, Endrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16467
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 46634 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46634, Esfenvalerate/Fenvalerate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53229
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46634, Esfenvalerate/Fenvalerate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53228
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46635 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46635, Ethoprop Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53241
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46635, Ethoprop **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53240
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46636 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46636, Fenpropathrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53243
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46636, Fenpropathrin **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53242
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36567 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded and sample size is insufficient.

Line of Evidence (LOE) for Decision ID 36567, Lead Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	17265
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36567, Lead **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	17264
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36567, Lead **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53254
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36567, Lead **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53253
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46637 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46637, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53256
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46637, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53255
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	46638	Region 3
Arroyo Grande Creek (below Lopez Lake)		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Neither of the two sample exceed any of the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two sample exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46638, Malathion	**Region 3**
Arroyo Grande Creek (below Lopez Lake)	

LOE ID:	53263
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46638, Malathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53257
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46638, Malathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53264
Pollutant:	Malathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 36412 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this sample size is insufficient to

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36412, Mercury **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53265
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36412, Mercury **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53266

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36412, Mercury **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	17347
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36412, Mercury **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	17346
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 46639 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed and of the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed and of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46639, Methidathion Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53267
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the

	criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46639, Methidathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53086
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46639, Methidathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53087
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46640 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the water quality objective and neither of the water samples exceeded any of the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	

Line of Evidence (LOE) for Decision ID 46640, Methyl Parathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53088
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from

	drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46640, Methyl Parathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53098
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46640, Methyl Parathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53097
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46640, Methyl Parathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53090
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46640, Methyl Parathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53089
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]

Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46641 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 65 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 65 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46641, Nitrogen, Nitrite Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49327
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Nitrite as N.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46641, Nitrogen, Nitrite **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49312
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38332 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-eight lines of evidence are available in the administrative record to assess this pollutant. Two beneficial uses are assessed. Eighteen of 228 samples exceed the Cold Freshwater Habitat objective. Seven of the 228 samples exceed the objective for Warm Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Water Habitats and the dissolved oxygen levels appear to be supporting those beneficial uses. Therefore, the use support rating for this pollutant is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighteen of 228 samples exceed the Cold Freshwater Habitat objective. Seven of the 228 samples exceed the objective for Warm Freshwater Habitat. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49133
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 5 of 31 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12581
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 12 of 45 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49089
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 4 of 31 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49090
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49091
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 5 of 31

samples exceed the criterion for Oxygen, Saturation.

Data Reference: Coastal Confluences field data 2007-2010

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).

Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]

Temporal Representation: Data was collected over the time period 1/18/2007-5/19/2010.

Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID: 49092

Pollutant: Dissolved oxygen saturation

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 34

Number of Exceedances: 7

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 7 of 34 samples exceed the criterion for Oxygen, Saturation.

Data Reference: Santa Lucia Watershed Rotation field data 2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).

Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]

Temporal Representation: Data was collected over the time period 1/21/2009-12/16/2009.

Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49131
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49132
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48216
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]

Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48217
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48218
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48219
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12496
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 9 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 4 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12512
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 3 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12513
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12514
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 13 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12515
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 13 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12729
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12493
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling

	(DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 4 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12494
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 4 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310ARG-Arroyo Grande Creek at 22nd Street]

Temporal Representation: Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID: 14748

Pollutant: Oxygen, Dissolved

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 12

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data
Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]

Temporal Representation: Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved — Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14749
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved — Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14493
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14494
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12495
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 9 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 4 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande

	Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12580
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 12 of 45 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12728

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 4 of 45 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38332, Oxygen, Dissolved **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49134
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 7 of 34 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46642 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46642, PCBs (Polychlorinated biphenyls) Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53140
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 310ARGxxx (310ARG-Arroyo Grande Creek at 22nd Street).
Temporal Representation:	The samples were collected on 6/11/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46643 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46643, Parathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53134
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46643, Parathion **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53133
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46644 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46644, Permethrin, total **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53142
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46644, Permethrin, total **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53141
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46645 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Neither of the samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46645, Phorate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53105
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46645, Phorate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53120
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46645, Phorate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53106
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46646 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46646, Phosmet Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53123
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46646, Phosmet **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53122
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46646, Phosmet **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53121
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek(below res.) - 310USG]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46647 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Nine of the 65 samples exceed the site specific water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 65 samples exceed the site specific water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46647, Sodium **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49122
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46647, Sodium **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49121
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 9 of 31 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36568 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. None of the 211 samples exceed the water quality objective. Note that the pollutant name for the older LOEs is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 211 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36568, Specific Conductivity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10932
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande

	Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36568, Specific Conductivity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10967
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36568, Specific Conductivity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48174
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36568, Specific Conductivity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10748
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and

	results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36568, Specific Conductivity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49292
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36568, Specific Conductivity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49291
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37089	Region 3
Arroyo Grande Creek (below Lopez Lake)		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 231 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 231 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37089, Temperature, water	**Region 3**
Arroyo Grande Creek (below Lopez Lake)	

LOE ID:	12746
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37089, Temperature, water **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12511
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 4 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande

	Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37089, Temperature, water **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49097
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37089, Temperature, water **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49098
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37089, Temperature, water **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14528
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37089, Temperature, water **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48245
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]

Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37089, Temperature, water **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12532
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 46648 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Ninteen of the 104 samples exceed the water quality objective when evaluated as a single sample maximum. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for each of the LOEs. For LOE 49119 two of the four annual means exceed the site specific objective. For LOE 49120, zero of the two annual means exceed the site specific objective. For LOE 48177, zero of four annual means exceed the site specific objective. Therefore, a total of two of the ten annual means exceed the site specific objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the ten annual means exceed the site specific objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46648, Total Dissolved Solids **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49120
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 3 of 34 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 800 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46648, Total Dissolved Solids **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49119
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 12 of 31 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 800 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 46648, Total Dissolved Solids **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48177
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. TDS shall not exceed 800 mg/L
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 41398 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 212 samples exceeded the evaluation guideline for Cold Freshwater Habitats and 13 of the 212

samples exceeded the evaluation guideline for Warm Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of the 212 samples exceeded the evaluation guideline for Cold Freshwater Habitats and 13 of the 212 samples exceeded the evaluation guideline for Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49137
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49138
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49095
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49096
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande

	Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48243
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48244
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12550
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/30/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12531
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 6 of 50 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12565
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/30/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12744
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12745
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14527
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14512
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41398, Turbidity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	12530
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 6 of 50 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36344 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the

Conclusion:	Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36344, Zinc **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	17850
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36344, Zinc **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	17864
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36344, Zinc **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53157
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36344, Zinc **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53158
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36464 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Forty-two lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 223 samples exceed the water quality objective for Agricultural Supply. Seven of the 223 samples exceed the water quality objective for Cold and Warm Freshwater Habitats. Twenty-nine of the 223 samples exceed the water quality objective for Recreation and for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 223 samples exceed the water quality objective for Agricultural Supply. Seven of the 223 samples exceed the water quality objective for Cold and Warm Freshwater Habitats. Twenty-nine of the 223 samples exceed the water quality objective for Recreation and for Municipal and Domestic Supply. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36464, pH Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49328
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	31
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 2 of 31 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49329
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34

samples exceed the criterion for pH.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49093
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49094
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49105
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	31
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 7 of 31 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49106
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande

	Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49111
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 7 of 31 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49112
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49115
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	31
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 7 of 31 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49116
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48227
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48228
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48229
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 4 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48230
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 4 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48231
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 4 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48232
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14710
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14711
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10949
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10950
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH — Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10951
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH — Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14509
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14510
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14495
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	14496
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10768

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10729
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 5 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10730
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	58
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 13 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10731
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 13 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10749
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10750
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10751
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10732
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	58
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 13 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10952
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10747
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 5 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not

	be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10766
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10767
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10968
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	58
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 7 of 58 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10948
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	10933
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49135
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36464, pH **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49136
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for pH.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46621 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Thirteen lines of evidence are available. Four of the four benthic invertebrate samples exceed (fall below) the Southern California IBI threshold for poor community composition. Two of these samples are also assessed using the California Stream Condition Index (CSCI) and both of those scores also indicate poor community condition. This water segment is also on the CWA section 303(d) List for elevated Nickel concentrations in sediment and for toxicity to invertebrate test organisms in both water and sediment samples. Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water segment exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index and SoCal IBI. 4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs). If CSCI scores have not be calculated for data and only IBI scores are available, IBI scores can still be used to interpret the data.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23573
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street].
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16984
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23571
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53100
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53239
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores are 39 or below and are therefore are below the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in this waterbody resulting in the collection of more than one sample at the Arroyo Grande station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the 2007 sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The two RWB samples included in this assessment have the following IBI scores: The 2005 sample IBI score was 14 and the 2007 sample IBI score was 16.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310ARGxxx-Arroyo Grande Creek at 22nd Street
Temporal Representation:	Surveys done on April 29, 2005 and April 6, 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53147
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. One of the samples exhibited significant toxicity to Hyalella survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310AGFxxx also known as 310AGF.
Temporal Representation:	The sample was collected in May 2009.

Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53146
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARGxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53145
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARG - Arroyo Grande at 22nd St.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53154
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selanastrum capricornutum cell count. The toxicity test included total cell count of Selenastrum capricornutum, survival and reproducion of Ceriodaphnia dubia and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310AGF - Arroyo Grande Creek at Fair Oaks bridge.
Temporal Representation:	The sample was collected in September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53249
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores in this water body were 39 or lower and therefore are below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310AGSxxx-Arroyo Grande Creek @ Strother Park
Temporal Representation:	Surveys done on May 15, 2009 and June 1, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	79148
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for this site are 0.537516394 and 0.579513643953437. This site's samples are below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health.Â The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded biological condition) to greater than 1 (healthy biological condition and equivalent to reference).Â CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact healthy biological condition, 0.91 to 0.80 = possibly altered degraded biological condition, 0.79 to 0.63 = likely altered degraded biological condition, less than or equal to 0.62 = very likely altered degraded biological condition.Â Sites with scores below 0.79 are considered to have exceeded the water quality objective impaired for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 310ARGxxx-Arroyo Grande Creek at 22nd Street
Temporal Representation:	Surveys done on April 29, 2005 and April 6, 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78399
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. Samples exhibited significant toxicity to growth of Hyalella azteca in the sample collected on 4/22/2008.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 310USG-Arroyo Grande Creek(below res.).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following that program's QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46621, Benthic Community Effects **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78403
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Three of the eleven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction and survival of Ceriodaphnia dubia and growth of Pimephales promelas in the sample collected on 1/19/10 and to reproduction and survival of Ceriodaphnia dubia in sample collected on 9/25/08 and 8/20/09.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

	that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 310USG-Arroyo Grande Creek(below res.).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following their QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **36565** **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Nickel**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Twelve lines of evidence are available in the administrative record to assess this pollutant. Four LOEs summarize nickel concentrations in sediment while eight LOEs summarize toxicity results. Two of the two sediment samples exceed the evaluation guideline applied to protect for aquatic life beneficial uses. Three out of six sediment samples exhibited toxicity. Arroyo Grande Creek (below Lopez Lake) is being added to the 303(d) List for toxicity in sediment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the two samples exceed the evaluation guideline and three out of six sediment samples exhibited toxicity. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78401
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. One of the samples exhibited significant toxicity to Hyalella survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310AGFxxx also known as 310AGF.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78400
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARGxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78399
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. Samples exhibited significant toxicity to growth of Hyalella azteca in the sample collected on 4/22/2008.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 310USG-Arroyo Grande Creek(below res.).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following that program's QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78402
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARG - Arroyo Grande at 22nd St.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53146
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARGxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53147
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. One of the samples exhibited significant toxicity to Hyalella survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310AGFxxx also known as 310AGF.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53148
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. Samples exhibited significant toxicity to growth of Hyalella azteca in the sample collected on 4/22/2008.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 310USG-Arroyo Grande Creek(below res.).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following that program's QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53145
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARG - Arroyo Grande at 22nd St.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53099
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53100
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Grande Creek (below Lopez Lake) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek (below Lopez Lake) was collected at 1 monitoring site [Arroyo Grande Creek at 22nd Street - 310ARGxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16985
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36565, Nickel **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16984
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36995 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty-nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 178 nitrate samples and zero of 108 nitrate/nitrite samples exceed the water quality objective for the Agricultural Supply beneficial use. Two of the 178 nitrate samples and 2 of the 120 nitrate/nitrite samples exceed the water quality objective for the Drinking Water beneficial use. However, 72 of the 76 nitrate samples and 105 of the 108 nitrate/nitrite samples exceed the Central Coast evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitats. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water body segment. 1. Dissolved oxygen for this water body ranged from 3.3 mg/L to 17.8 mg/L, at times exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the Warm Freshwater Habitat objective of 5.0 mg/L. In addition, this waterbody often exceeds the upper dissolved oxygen screening value of 13.0 mg/L (R3 NNE Technical Report, 2010). 2. Visual observations of floating algal mats ranged from 0 to 90% cover, occasionally exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3. Water column chlorophyll a concentration ranged from 0 to 31.5 ug/L, occasionally exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 4. Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 1.61 mg/L to 2.08 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-two of the 76 nitrate samples and 105 of the 108 nitrate/nitrite samples exceed the Central Coast evaluation guideline for Cold and Warm Freshwater Habitat. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Furthermore, there is sufficient supporting evidence of eutrophication in this water segment. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID: 49350

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 28 of 30 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49102
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	34
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49103
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	32
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 2 of 32 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49104
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49127
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 28 of 30 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49128
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 33 of 34 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49129
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 31 of 32 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49130
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 36 of 37 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49086
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 33 of 34 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49087
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 31 of 32 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49088

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 36 of 37 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49101
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48205
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48206
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48207
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 38 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48208
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48215
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 38 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48194
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48195
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	48196
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at USGS gague]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49293
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 30

samples exceed the criterion for Nitrate as N.

Data Reference: Coastal Confluences field data 2007-2010

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.

Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]

Temporal Representation: Data was collected over the time period 1/18/2007-5/19/2010.

Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID: 9565

Pollutant: Nitrate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 57

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Nitrate as N.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference: Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9564
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15278
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9870
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49311
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	9871
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGB-Arroyo Grande Creek at Biddle Park, 310AGF-Arroyo Grande

	Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49309
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 3 monitoring sites [310AGF-Arroyo Grande Creek at Fair Oaks, 310AGS-Arroyo Grande Creek at Strother Park, 310AGB-Arroyo Grande Creek at Biddle Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36995, Nitrate **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	49310
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected over the time period 1/18/2007-5/19/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42396 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant

water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy.

The pollutant name for this decision has been changed to Toxicity. In previous listing cycles, separate fact sheets were developed for Sediment Toxicity and Unknown Toxicity (AKA water toxicity). In this current assessment cycle, those two fact sheets and all of the associated LOEs are combined into this single fact sheet for Toxicity.

Twenty-two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Twelve LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and six additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in sediment samples. Four of the eight sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Ten LOEs summarize water samples. Three water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twelve water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fifteen total samples are available to assess toxic effects in water samples. Three of the fifteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 15 water samples and four of the eight sediment samples exhibited significant toxicity to one or more of the test organisms and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23573
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001)

	data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street].
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23574
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street].
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23559
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23572
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23578
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

	December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23577
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]

Temporal Representation:	Data was collected over the time period 2/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23566
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23558
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23565
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected over the time period 2/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	23571
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310USG - Arroyo Grande Creek at old USGS Gauge]
Temporal Representation:	Data was collected on a single day 5/16/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53149

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Three of the eleven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction and survival of Ceriodaphnia dubia and growth of Pimephales promelas in the sample collected on 1/19/10 and to reproduction and survival of Ceriodaphnia dubia in sample collected on 9/25/08 and 8/20/09.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 310USG-Arroyo Grande Creek(below res.).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following their QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53148
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. Samples exhibited significant toxicity to growth of Hyalella azteca in the sample collected on 4/22/2008.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 310USG-Arroyo Grande Creek(below res.).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following that program's QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53146
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental

	Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARGxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53145
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARG - Arroyo Grande at 22nd St.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53147

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. One of the samples exhibited significant toxicity to Hyalella survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310AGFxxx also known as 310AGF.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	53154
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selanastrum capricornutum cell count. The toxicity test included total cell count of Selenastrum capricornutum, survival and reproducion of Ceriodaphnia dubia and survival and biomass of Pimephales promelas. One sample can have multiple toxicity

	test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310AGF - Arroyo Grande Creek at Fair Oaks bridge.
Temporal Representation:	The sample was collected in September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78401
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. One of the samples exhibited significant toxicity to Hyalella survival. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level,

	AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310AGFxxx also known as 310AGF.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78403
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Three of the eleven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction and survival of Ceriodaphnia dubia and growth of Pimephales promelas in the sample collected on 1/19/10 and to reproduction and survival of Ceriodaphnia dubia in sample collected on 9/25/08 and 8/20/09.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 310USG-Arroyo Grande Creek(below res.).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following their QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78400
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARGxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78404
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selanastrum capricornutum cell count. The toxicity test included total cell count of Selenastrum capricornutum, survival and reproducion of Ceriodaphnia dubia and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310AGF - Arroyo Grande Creek at Fair Oaks bridge.
Temporal Representation:	The sample was collected in September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78402
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

	control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310ARG - Arroyo Grande at 22nd St.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42396, Toxicity **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	78399
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. Samples exhibited significant toxicity to growth of Hyalella azteca in the sample collected on 4/22/2008.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The statistical test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at 310USG-Arroyo Grande Creek(below res.).
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data following that program's QAPP and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	41501	Region 3
Arroyo Grande Creek (below Lopez Lake)		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41501, Anthracene	**Region 3**
Arroyo Grande Creek (below Lopez Lake)	

LOE ID:	15715
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41501, Anthracene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15716
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1

	monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41552 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41552, Benzo(a)anthracene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15600
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41552, Benzo(a)anthracene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15599
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41502 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41502, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15470
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41502, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15483
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41506 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41506, Chrysene (C1-C4) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15859
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41506, Chrysene (C1-C4) **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	15858
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41594 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41594, Fluoranthene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16552
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41594, Fluoranthene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16565
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39765 **Region 3**

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39765, Fluorene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16522
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39765, Fluorene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16521
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	41434	Region 3
Arroyo Grande Creek (below Lopez Lake)		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41434, Naphthalene	**Region 3**
Arroyo Grande Creek (below Lopez Lake)	

LOE ID:	17163
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41434, Naphthalene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	17164
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39786 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39786, Phenanthrene Region 3

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	17083
Pollutant:	Phenanthrene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39786, Phenanthrene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	17084
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41435 Region 3

Arroyo Grande Creek (below Lopez Lake)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41435, Pyrene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16978
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41435, Pyrene **Region 3**

Arroyo Grande Creek (below Lopez Lake)

LOE ID:	16965
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Arroyo Grande Creek(below res) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Arroyo Grande Creek(below res) was collected at 1 monitoring site [310ARG-Arroyo Grande Creek at 22nd Street]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pismo Creek**
Water Body ID: **CAR3102601420020124125144**
Water Body Type: **River & Stream**

DECISION ID **40742** **Region 3**
Pismo Creek

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Seventy-two of the 89 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy-two of the 89 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40742, Chloride **Region 3**
Pismo Creek

LOE ID: 10113

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	52
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 38 of 52 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40742, Chloride **Region 3**

Pismo Creek

LOE ID:	50966
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 34 of 37 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40845**	**Region 3**
Pismo Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E.coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Sixteen of 63 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 25 samples exceed the water quality objective for non-contact recreation.]. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixteen of 63 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40845, Escherichia coli (E. coli) **Region 3**

Pismo Creek

LOE ID:	51028
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 6 of 38 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40845, Escherichia coli (E. coli) **Region 3**

Pismo Creek

LOE ID:	10811
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	10

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 10 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40845, Escherichia coli (E. coli) **Region 3**

Pismo Creek

LOE ID:	10812
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40163 Region 3

Pismo Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Thirty one of 95 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 4 of 95 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty one of the 95 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40163, Fecal Coliform Region 3

Pismo Creek

LOE ID:	10734
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 2 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40163, Fecal Coliform **Region 3**

Pismo Creek

LOE ID:	10733
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	23
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 23 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40163, Fecal Coliform **Region 3**

Pismo Creek

LOE ID:	50957
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 2 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40163, Fecal Coliform **Region 3**

Pismo Creek

LOE ID:	51027
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 8 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40871** **Region 3**

Pismo Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Forty-nine of the 109 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 27 of the 109 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-nine of the 109 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 27 of the 109 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	50972
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 19 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	50973
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 35 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved — Region 3

Pismo Creek

LOE ID:	51009
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 35 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved — Region 3

Pismo Creek

LOE ID:	51008
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 26 of 40 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	12537
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 17 of 58 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	12553
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 39 of 58 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	12586
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	12552
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 39 of 58 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	12551
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 6 of 58 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	12589
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	12588
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40871, Oxygen, Dissolved **Region 3**

Pismo Creek

LOE ID:	12587
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40022 Region 3

Pismo Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Eighty-one of the 89 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighty-one of the 89 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40022, Sodium Region 3

Pismo Creek

LOE ID:	9875
Pollutant:	Sodium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	45
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 45 of 52 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40022, Sodium **Region 3**

Pismo Creek

LOE ID:	50982
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 36 of 37 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40828**	**Region 3**
Pismo Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 95 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 97 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40828, Ammonia **Region 3**

Pismo Creek

LOE ID:	51013
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40828, Ammonia **Region 3**

Pismo Creek

LOE ID:	50960
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40828, Ammonia **Region 3**

Pismo Creek

LOE ID:	50994
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40828, Ammonia **Region 3**

Pismo Creek

LOE ID:	10111
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40828, Ammonia **Region 3**

Pismo Creek

LOE ID:	10109
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40828, Ammonia **Region 3**

Pismo Creek

LOE ID:	10110
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52475**	**Region 3**
Pismo Creek		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample was below the California Stream Condition Index (CSCI) score of 0.79 which indicates poor water quality for this area. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs).

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 52475, Benthic Community Effects **Region 3**

Pismo Creek

LOE ID:	79406
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI score for this site is 0.561762476. This site is below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 310PISxxx-Pismo Creek above Highway 101, Frady Lane Bridge.
Temporal Representation:	Surveys done on April 29, 2005.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 52475, Benthic Community Effects **Region 3**

Pismo Creek

LOE ID:	56803
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was 39 or lower and therefore is below the impairment threshold of the Southern California IBI.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310PISxxx-Pismo Creek above Highway 101, Frady Lane Bridge.
Temporal Representation:	Surveys done on April 29, 2005.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID **40772** **Region 3**

Pismo Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seven of the

89 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 89 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40772, Boron **Region 3**

Pismo Creek

LOE ID:	10112
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 52 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40772, Boron **Region 3**

Pismo Creek

LOE ID:	50965
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 7 of 37 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40870** **Region 3**

Pismo Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Four of the 93 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 93 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40870, Chlorophyll-a **Region 3**

Pismo Creek

LOE ID:	12571
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface

	water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40870, Chlorophyll-a **Region 3**

Pismo Creek

LOE ID:	12572
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40870, Chlorophyll-a **Region 3**

Pismo Creek

LOE ID:	9876
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40870, Chlorophyll-a **Region 3**

Pismo Creek

LOE ID:	9889
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40870, Chlorophyll-a **Region 3**

Pismo Creek

LOE ID:	50969
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 4 of 37 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40870, Chlorophyll-a **Region 3**

Pismo Creek

LOE ID:	50995

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 4 of 37 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40239**	**Region 3**
Pismo Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 97 nitrate samples and zero of the 40 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. Four of the 38 nitrate samples and four of the 40 nitrate/nitrite samples exceed the Central Coast Region evaluation guideline for Cold and Warm Freshwater Habitat. The final use rating is set to 'insufficient information' because the following supporting evidence does not make a strong case for the nutrient concentrations causing or contributing to eutrophic conditions:

1) Dissolved oxygen for this water body ranged from 0.51 mg/L to 13.12 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L.
2) Water column chlorophyll a concentration ranged up to 150 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body that was below the screening threshold.
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted algae biomass concentrations within the range of acceptable concentrations.

This supporting evidence does show that eutrophic conditions sometimes occur but the model does not predict them based on the known nutrient concentrations in the creek. Furthermore, staff have observed seeps at this location and stagnant flow conditions. These are both likely to contribute to the low dissolved oxygen conditions.

Based on the readily available data and information, the weight of evidence indicates that there is in sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 38 nitrate samples and four of the 40 nitrate/nitrite samples exceed the Central Coast Region evaluation guideline for Cold and Warm Freshwater Habitat and although this does exceed the allowable frequency listed in Table 3.1 of the Listing Policy, there is insufficient supporting evidence indicating presence of or risk of eutrophication cause by nutrients.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40239, Nitrate **Region 3**

Pismo Creek

LOE ID:	9873
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40239, Nitrate **Region 3**

Pismo Creek

LOE ID:	9874
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride

	concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40239, Nitrate **Region 3**

Pismo Creek

LOE ID:	50996
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 4 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40239, Nitrate **Region 3**

Pismo Creek

LOE ID:	51024
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40239, Nitrate **Region 3**

Pismo Creek

LOE ID:	51025
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40239, Nitrate **Region 3**

Pismo Creek

LOE ID:	50979
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40239, Nitrate **Region 3**

Pismo Creek

LOE ID:	50968
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40239, Nitrate — Region 3

Pismo Creek

LOE ID:	50970
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 4 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40239, Nitrate — Region 3

Pismo Creek

LOE ID:	50971
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40239, Nitrate **Region 3**

Pismo Creek

LOE ID:	50997
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 4 of 40 samples exceed the

	criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49191**	**Region 3**
Pismo Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 39 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 39 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49191, Nitrogen, Nitrite **Region 3**

Pismo Creek

LOE ID:	50980
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40023** **Region 3**

Pismo Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 109 samples exceed the evaluation guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 109 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40023, Temperature, water **Region 3**

Pismo Creek

LOE ID:	51012
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]

Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40023, Temperature, water **Region 3**

Pismo Creek

LOE ID:	12607
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40023, Temperature, water **Region 3**

Pismo Creek

LOE ID:	12570

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41554**	**Region 3**
Pismo Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity). Zero of the one sediment samples resulted in a significant toxic effect to one or more test organisms.

Sixteen LOEs summarize water samples. One water sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in water samples. Zero of the three water samples resulted in a significant toxic effect to one or more test organisms.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41554, Toxicity **Region 3**

Pismo Creek

LOE ID:	24623
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41554, Toxicity **Region 3**

Pismo Creek

LOE ID:	24601
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41554, Toxicity **Region 3**

Pismo Creek

LOE ID:	24588
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41554, Toxicity **Region 3**

Pismo Creek

LOE ID:	23956
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41554, Toxicity **Region 3**

Pismo Creek

LOE ID:	24611
Pollutant:	Invertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41554, Toxicity **Region 3**

Pismo Creek

LOE ID:	24589
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41554, Toxicity **Region 3**

Pismo Creek

LOE ID:	79542
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selenastrum capricornutum but had no significant effects to either Ceriodaphnia dubia, or Pimephales promelas. The significant effect to Selenastrum is not counted as an exceedance here because the conductivity of the sample water was above the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo

	testing. The conductivity of the sample water from September 22, 2009 was higher than 1500 uS/cm but the significance of the toxic effect for the sample result was not calculated using the high salinity control sample and therefore is not counted as an exceedance.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. The SL code is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. EPA-821-R-02-012 Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310PISxxx - Pismo Creek at Rail Road Bridge.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41554, Toxicity **Region 3**

Pismo Creek

LOE ID:	59002
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selenastrum capricornutum but had no significant effects to either Ceriodaphnia dubia, or Pimephales promelas. The significant effect to Selenastrum is not counted as an exceedance here because the conductivity of the sample water was above the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. The conductivity of the sample water from September 22, 2009 was higher than 1500 uS/cm but the significance of the toxic effect for the sample result was not calculated using the high salinity control sample and therefore is not counted as an exceedance.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. The SL code is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. EPA-821-R-02-012 Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310PISxxx - Pismo Creek at Rail Road Bridge.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID	40231	Region 3
Pismo Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 106 samples exceed the water quality objectives for Agriculture, Drinking Water and Recreation. Three of the 106 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 106 samples exceed the water quality objectives for Agriculture, Drinking Water and Recreation and three of the 106 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10736
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10753
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10754
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor

	raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10755
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH — Region 3

Pismo Creek

LOE ID:	10791
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH — Region 3

Pismo Creek

LOE ID:	10810
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10752
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10756
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10792
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10790
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10793
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]

Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	10809
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	51010
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 3 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	50981
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	50983
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 3 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	50956
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	50958
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40231, pH **Region 3**

Pismo Creek

LOE ID:	51026
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40230 **Region 3**

Pismo Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 92 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 13 of the 92 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of the 92 samples exceed the evaluation guideline for Cold Freshwater Habitat and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 40230, Turbidity **Region 3**

Pismo Creek

LOE ID:	12569
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 3 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40230, Turbidity **Region 3**

Pismo Creek

LOE ID:	12606
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/30/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40230, Turbidity **Region 3**

Pismo Creek

LOE ID:	12605
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/30/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40230, Turbidity **Region 3**

Pismo Creek

LOE ID:	12555
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 3 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40230, Turbidity **Region 3**

Pismo Creek

LOE ID:	51011
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 16 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40230, Turbidity **Region 3**

Pismo Creek

LOE ID:	50984
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 10 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40858	Region 3
Pismo Creek		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40858, Anthracene	**Region 3**
Pismo Creek	

LOE ID:	15667
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40858, Anthracene **Region 3**

Pismo Creek

LOE ID:	15668
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40846 Region 3
Pismo Creek

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40846, Arsenic Region 3
Pismo Creek

LOE ID:	15739
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1

	samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40846, Arsenic **Region 3**

Pismo Creek

LOE ID:	15753
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40760 Region 3

Pismo Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40760, Benzo(a)anthracene Region 3

Pismo Creek

LOE ID:	15808
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40760, Benzo(a)anthracene **Region 3**

Pismo Creek

LOE ID:	15809
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40774 Region 3
Pismo Creek

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40774, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3
Pismo Creek

LOE ID:	15422
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40774, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Pismo Creek

LOE ID:	15435
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40813 Region 3

Pismo Creek

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40813, Cadmium Region 3

Pismo Creek

LOE ID:	15535

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40813, Cadmium **Region 3**

Pismo Creek

LOE ID:	15536
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40220**	**Region 3**
Pismo Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water samples exceeded the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single water sample did not exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40220, Chlorpyrifos **Region 3**

Pismo Creek

LOE ID:	16111
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40220, Chlorpyrifos — Region 3

Pismo Creek

LOE ID:	16228
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40220, Chlorpyrifos — Region 3

Pismo Creek

LOE ID:	16227
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40220, Chlorpyrifos **Region 3**

Pismo Creek

LOE ID:	16124
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40812**	**Region 3**
Pismo Creek		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 40812, Chromium **Region 3**

Pismo Creek

LOE ID:	15977
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40812, Chromium **Region 3**

Pismo Creek

LOE ID:	15978
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40798**	**Region 3**
Pismo Creek		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40798, Chrysene (C1-C4) **Region 3**

Pismo Creek

LOE ID:	16063
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40798, Chrysene (C1-C4) **Region 3**

Pismo Creek

LOE ID:	16062
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40797**	**Region 3**
Pismo Creek		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40797, Copper **Region 3**

Pismo Creek

LOE ID:	15892
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40797, Copper **Region 3**

Pismo Creek

LOE ID:	15879
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40221**	**Region 3**
Pismo Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in

sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40221, Diazinon **Region 3**

Pismo Creek

LOE ID:	16772
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40221, Diazinon **Region 3**

Pismo Creek

LOE ID:	16865
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40221, Diazinon **Region 3**

Pismo Creek

LOE ID:	16864
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40221, Diazinon **Region 3**

Pismo Creek

LOE ID:	16717
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40754**	**Region 3**
Pismo Creek		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with

sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40754, Dieldrin **Region 3**

Pismo Creek

LOE ID:	16733
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40754, Dieldrin **Region 3**

Pismo Creek

LOE ID:	16732
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40903** **Region 3**

Pismo Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40903, Endrin **Region 3**

Pismo Creek

LOE ID:	16420
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-

	Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40903, Endrin **Region 3**

Pismo Creek

LOE ID:	16419
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40902** **Region 3**

Pismo Creek

Pollutant: **Fluoranthene**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40902, Fluoranthene **Region 3**

Pismo Creek

LOE ID:	16517
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40902, Fluoranthene **Region 3**

Pismo Creek

LOE ID:	16504
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40931	Region 3
Pismo Creek		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40931, Fluorene	**Region 3**
Pismo Creek	

LOE ID:	16381
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40931, Fluorene **Region 3**

Pismo Creek

LOE ID:	16382
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40930	Region 3
Pismo Creek		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40930, Lead	**Region 3**
Pismo Creek	

LOE ID:	17217
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40930, Lead **Region 3**

Pismo Creek

LOE ID:	17216
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]

Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40929 Region 3

Pismo Creek

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40929, Mercury Region 3

Pismo Creek

LOE ID:	17301
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40929, Mercury **Region 3**

Pismo Creek

LOE ID:	17314
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40915 Region 3

Pismo Creek

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40915, Naphthalene Region 3

Pismo Creek

LOE ID:	17367
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40915, Naphthalene **Region 3**

Pismo Creek

LOE ID:	17368
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40857 Region 3
Pismo Creek

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40857, Nickel Region 3
Pismo Creek

LOE ID:	16936
Pollutant:	Nickel

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40857, Nickel **Region 3**

Pismo Creek

LOE ID:	16937
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40941** **Region 3**

Pismo Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40941, Phenanthrene **Region 3**

Pismo Creek

LOE ID:	17036
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40941, Phenanthrene **Region 3**

Pismo Creek

LOE ID:	17035
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40021	Region 3
Pismo Creek		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 40021, Pyrene **Region 3**

Pismo Creek

LOE ID:	16899
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40021, Pyrene **Region 3**

Pismo Creek

LOE ID:	16913
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40872**	**Region 3**
Pismo Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. One of the 86 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 86 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40872, Specific Conductivity **Region 3**

Pismo Creek

LOE ID:	10789
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40872, Specific Conductivity **Region 3**

Pismo Creek

LOE ID:	10735
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40872, Specific Conductivity **Region 3**

Pismo Creek

LOE ID:	50967
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pismo Creek to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40243**	**Region 3**
Pismo Creek		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40243, Zinc **Region 3**

Pismo Creek

LOE ID:	17810
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40243, Zinc **Region 3**

Pismo Creek

LOE ID:	17794
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pismo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pismo Creek was collected at 1 monitoring site [310PIS-Pismo Creek above Highway 101]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Coon Creek**
Water Body ID: **CAR3102501019990225101818**
Water Body Type: **River & Stream**

DECISION ID **38444** **Region 3**
Coon Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 17 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 17 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 17 samples exceed the water quality objectives for aquatic life and drinking water uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38444, Ammonia **Region 3**
Coon Creek

LOE ID: 50156

Pollutant: Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38444, Ammonia **Region 3**

Coon Creek

LOE ID:	50194
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38444, Ammonia **Region 3**

Coon Creek

LOE ID:	9982
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38444, Ammonia **Region 3**

Coon Creek

LOE ID:	9981
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38923** **Region 3**

Coon Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38923, Boron **Region 3**

Coon Creek

LOE ID:	9983
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38923, Boron **Region 3**

Coon Creek

LOE ID:	49984
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	38855	Region 3
Coon Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38855, Chloride	**Region 3**
Coon Creek	

LOE ID:	49985
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38855, Chloride **Region 3**

Coon Creek

LOE ID:	9997
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38885 Region 3

Coon Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 17 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. water quality objective for agricultural uses . Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 17 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38885, Chlorophyll-a Region 3

Coon Creek

LOE ID:	12677
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38885, Chlorophyll-a **Region 3**

Coon Creek

LOE ID:	50157
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47207**	**Region 3**
Coon Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 6 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 6 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47207, Escherichia coli (E. coli) **Region 3**

Coon Creek

LOE ID:	50216
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38975** **Region 3**

Coon Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the water quality objective for water contact recreation (i.e. swimming). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38975, Fecal Coliform — Region 3

Coon Creek

LOE ID:	50218
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38975, Fecal Coliform **Region 3**

Coon Creek

LOE ID:	50215
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38975, Fecal Coliform **Region 3**

Coon Creek

LOE ID:	10884
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38975, Fecal Coliform **Region 3**

Coon Creek

LOE ID:	10883
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38411**	**Region 3**
Coon Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 76 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 65 nitrate samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. Zero of the 6 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 6 nitrate/nitrite samples exceed the water quality objective for Cold Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at

1.0 mg/L for Cold and Warm Freshwater Habitat. Insufficient evidence was found to support nitrate as a cause of impairment for Cold or Warm Freshwater habitats:
1) Dissolved oxygen for this water body ranged from 5.03 mg/L to 11.15mg/L, once exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and never exceeding the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentration ranged from 0.86 to 3.3 ug/L, never exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) did not predict that benthic algal contribution to oxygen deficit, algae biomass, or benthic chlorophyll a concentrations for this water body exceed screening thresholds for warm or cold water habitat.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 76 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. One of the 65 nitrate samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. Zero of the 6 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Zero of the 6 nitrate/nitrite samples exceed the water quality objective for Cold Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	47939
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	47927
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 1 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	9998
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	9999
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	47926
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	50136
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	50137
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	50173
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	50213
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	50172
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38411, Nitrate **Region 3**

Coon Creek

LOE ID:	50196
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47208** **Region 3**

Coon Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 6 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47208, Nitrogen, Nitrite **Region 3**

Coon Creek

LOE ID:	50138
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38971** **Region 3**

Coon Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Zero of 76 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and zero of 36 samples (only the most recent data are compared to this water quality objective) exceed the fish spawning water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats and the dissolved oxygen levels are supporting the Cold beneficial use. Therefore, the use support rating for this pollutant is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 76 samples exceeded the Cold Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38971, Oxygen, Dissolved **Region 3**

Coon Creek

LOE ID: 50175

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38971, Oxygen, Dissolved **Region 3**

Coon Creek

LOE ID:	50174
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38971, Oxygen, Dissolved **Region 3**

Coon Creek

LOE ID:	12697
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 9/4/2002-9/5/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38971, Oxygen, Dissolved — Region 3

Coon Creek

LOE ID:	47940
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38971, Oxygen, Dissolved — Region 3

Coon Creek

LOE ID:	12679
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38971, Oxygen, Dissolved **Region 3**

Coon Creek

LOE ID:	12698
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 9/4/2002-9/5/2002. Diurnal monitoring conducted in

	summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38971, Oxygen, Dissolved **Region 3**

Coon Creek

LOE ID:	47942
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 2 of 56 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38971, Oxygen, Dissolved **Region 3**

Coon Creek

LOE ID:	12678
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38604**	**Region 3**
Coon Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38604, Sodium **Region 3**

Coon Creek

LOE ID:	10000
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38604, Sodium **Region 3**

Coon Creek

LOE ID:	50155

Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38974** **Region 3**

Coon Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 74 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 74 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38974, Specific Conductivity **Region 3**

Coon Creek

LOE ID:	50135
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38974, Specific Conductivity **Region 3**

Coon Creek

LOE ID:	47925
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38974, Specific Conductivity **Region 3**

Coon Creek

LOE ID:	10885
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38413**	**Region 3**
Coon Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 77 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 77 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38413, Temperature, water **Region 3**

Coon Creek

LOE ID:	47958
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38413, Temperature, water **Region 3**

Coon Creek

LOE ID:	12712
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 9/4/2002-9/5/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38413, Temperature, water **Region 3**

Coon Creek

LOE ID:	12696
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38413, Temperature, water **Region 3**

Coon Creek

LOE ID:	50193
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38429 Region 3
Coon Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Two of the 76 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 76 samples exceed the cold freshwater habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38429, Turbidity Region 3
Coon Creek

LOE ID:	50192
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38429, Turbidity **Region 3**

Coon Creek

LOE ID:	47957
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 2 of 59 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38429, Turbidity **Region 3**

Coon Creek

LOE ID:	12695
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38430** **Region 3**

Coon Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 75 samples exceed the water quality objectives for Agricultural Supply, Drinking Water and Recreation but 5 of the 75 samples exceed the water quality objective for Cold Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 75 samples exceed the water quality objectives for Agricultural Supply, Drinking Water and Recreation but 5 of the 75 samples exceed the water quality objective for Cold Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	10899
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	47956
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	47955
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	47954
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO -

	Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	10903
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	47943
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	10902
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	10900
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	10901
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Coon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	47944
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	58

Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Coon Creek to determine beneficial use support and results are as follows: 5 of 58 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 6/17/2002 4:20:00 PM-3/4/2010 9:48:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	50154
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO -

	Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	50214
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	50176
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	50234
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO -

	Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38430, pH **Region 3**

Coon Creek

LOE ID:	50217
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Coon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Coon Creek was collected at 1 monitoring site [310COO - Coon Creek at Pecho Valley Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Luis Obispo Creek (below Osos Street)**
Water Body ID: **CAR3102402119980828115513**
Water Body Type: **River & Stream**

DECISION ID **41885** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

The previous decision to add this water segment / pollutant combination to the Section 303(d) List was based on two water samples exceeding the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. However, one of those two samples was not a water sample and instead was a pore water or interstitial water sample and should not have been used as the basis of a decision.

Ten lines of evidence are available in the administrative record to assess this pollutant. The single water sample exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). This decision does not use pore water samples in the exceedance count.

One water sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. The other two pore water samples will not be used in this assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore, the results could not be quantified with the level of certainty required by the Listing Policy. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. The single pore water sample collected on April 1, 2004 contributed to the original listing during the 2010 listing cycle. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. When pore water samples are excluded from the exceedance count, one water sample exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and zero sediment samples exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded and the previous decision was in error because it included an exceedance in the pore water, a matrix for which there is no applicable evaluation guideline.

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	47721
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Ck at Los Osos Valley Road - 310SLVxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	47699
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Ck at Los Osos Valley Road - 310SLVxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16230
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16264
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16265
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16229
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]

Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	47649
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	47684

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57843
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41885, Chlorpyrifos **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57842
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).

Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 34151 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Nutrients**
Final Listing Decision:	**Delist from 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Reason for Delisting:	Change from general pollutant to specific pollutant listing (e.g. metals to copper)
TMDL Name:	San Luis Obispo Creek Nutrients
TMDL Project Code:	25
Date TMDL Approved by USEPA:	01/10/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because 1. There are no data associated with this decision 2. There are now decisions for nitrate, ammonia, nitrite and low dissolved oxygen and all the nutrient data are summarized in those decisions. Therefore RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision for the generic pollutant 'nutrients' has been replaced by individual decisions for each of the specific nutrients.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision for the generic pollutant 'nutrients' has been replaced by individual decisions for each of the specific nutrients.

Line of Evidence (LOE) for Decision ID 34151, Nutrients Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	1915
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID 38438 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Forty-seven of the 124 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-seven of the 124 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38438, Chloride Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	52002
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 9 of 24 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38438, Chloride **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51986
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 20 of 39 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38438, Chloride **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10067
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38438, Chloride **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10001
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 15 of 52 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38195 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eighty-nine of the 124 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighty-nine of the 124 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38195, Sodium — Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	10082
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 9 of 9 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38195, Sodium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10004
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 40 of 52 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38195, Sodium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52043
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 30 of 39 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38195, Sodium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52057
Pollutant:	Sodium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 10 of 24 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42461** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Pet Waste | Natural Sources | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	San Luis Obispo Creek Pathogen
TMDL Project Code:	89
Date TMDL Approved by USEPA:	09/23/2005
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.3 and 4.2 of the Listing Policy.

The pollutant name has been changed from the generic pollutant category 'pathogens' to 'fecal coliform". There is also a separate decision for E. coli.

Eleven lines of evidence are available in the administrative record to assess this pollutant however, LOE 1914 does not contain any data or information. Sixty-four of 152 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 14 of 152 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty-four of 152 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The San Luis Obispo Creek Pathogen TMDL has been approved by USEPA on 09/23/2005.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutants are being exceeded.

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11591
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]

Temporal Representation: Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID: 11607

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 15
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.

Data Reference:
Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]

Temporal Representation: Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform — Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	11791
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	58
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 58 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform — Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	11790
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	25

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 25 of 58 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	1914
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	

Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform **Region 3**
San Luis Obispo Creek (below Osos Street)

LOE ID: 81177

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 15
Number of Exceedances: 5

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation: Data was collected over the time period 1/15/2002-3/19/2003.
Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform **Region 3**
San Luis Obispo Creek (below Osos Street)

LOE ID: 81178

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 10 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52007
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52008
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 7 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51987
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 12 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42461, Fecal Coliform **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51988
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 15 of 24 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 35128 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agriculture | Municipal Point Sources | Natural Sources | Nonpoint Source | Other Urban Runoff
TMDL Name:	San Luis Obispo Creek Nutrients
TMDL Project Code:	25
Date TMDL Approved by USEPA:	01/10/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The name was changed for this decision from Nitrate (nitrate as NO3) to Nitrate. This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed

to assess listing status.

Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 190 nitrate samples exceed the water quality objectives for the Agricultural beneficial use and therefore this use is fully supported. However, 137 of the 190 nitrate samples and 83 of the 117 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. In addition, 105 of the 115 nitrate samples and 105 of the 117 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat.

The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing for Cold and Warm Freshwater Habitat. The following is a summary of the supporting evidence:

1) Dissolved oxygen for this water body ranged from 3.6 mg/L to 13.6 mg/L, at times exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L but rarely exceeding the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report.
2) Water column chlorophyll a concentration ranged up to 31.1 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for sites in the lower reaches of this water body ranging from 3.90 mg/L to 4.17 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 70 g/m2 ash-free dry weight (AFDW) to 85 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and at one site the warm water screening threshold of 80 grams/m2 (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 174 mg/m2 to 212 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2, and at one site the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred thirty-seven of the 190 nitrate samples and 83 of the 117 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. One hundred three of the 115 nitrate samples and 105 of the 117 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is sufficient supporting evidence of eutrophication in this water segment.
5. The San Luis Obispo Nitrate TMDL has been approved by USEPA on 01/10/2007.
6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list (addressed by a USEPA approved TMDL) because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID: 51968

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 11 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51969
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 31 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51970
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 12 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51911
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 14 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51967
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 30 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52046
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 13 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52045
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 40 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52005
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52021
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51759
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	40

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 40 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51760
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 13 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51761
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51762
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 14 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52047
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48899
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 50 of 50 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48912
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	50
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 40 of 50 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48914
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 50 of 50 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10003
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 41 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10081
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 15 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48871
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 50 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10068
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48884
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 50 of 50 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory

	Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48882
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	50
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 40 of 50 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48873
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 50 of 50 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35128, Nitrate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10002
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39960 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Thirteen lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which zero of the 135 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Five LOEs summarize total ammonia data and zero of the 190 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 135 samples exceed the water quality objective for unionized ammonia and zero of the 190 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52059
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52028

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52027
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52058
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51950
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51949
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48863
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 50 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	9986
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	9985
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	9984
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10051
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).

Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10052
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39960, Ammonia **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10065
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37805 **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of three sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37805, Arsenic **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15687
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37805, Arsenic **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15678
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37805, Arsenic **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15674
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37805, Arsenic **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15677
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37805, Arsenic **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57818
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37805, Arsenic **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57817
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51574 **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51574, Bifenthrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57827
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51574, Bifenthrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57828
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g

	and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38282 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 124 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 124 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38282, Boron Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	51984
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38282, Boron **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51985
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38282, Boron **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10066
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38282, Boron **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	9987
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 52 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38175** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three sediment samples exceeded the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38175, Cadmium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15472
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38175, Cadmium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15471
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38175, Cadmium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15493
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38175, Cadmium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15492
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38175, Cadmium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57830
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38175, Cadmium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57829
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51798	Region 3
San Luis Obispo Creek (below Osos Street)		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51798, Chlordane	Region 3
San Luis Obispo Creek (below Osos Street)	

LOE ID:	57841
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51798, Chlordane **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57840
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38447 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 134 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 134 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	52029
Pollutant:	Chlorophyll-a

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52044
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52060
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51758
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10017
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10018
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12574
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12575
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12751
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38447, Chlorophyll-a **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12737
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37718** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The pollutant name has been changed from Chromium (sediment) to Chromium. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Six LOEs summarize sediment samples and eight LOEs summarize toxicity samples. Three out of three sediment samples exceeded the aquatic life evaluation guideline. However, zero out of four sediment samples exhibited significant toxicity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three out of three sediment samples exceeded the evaluation guideline which exceeds the allowable frequency listed in Table 3.1. However, since zero out of four samples exhibited significant toxicity, this will not result in a listing as consistent with section 3.6 in the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	23972
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with

	alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15914
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	23973
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15913
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15934
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15935
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80335
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80337
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57813
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80334
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLB - San Luis Creek at San Luis Bay Drive.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57812
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57917
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57915
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37718, Chromium **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57914
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLB - San Luis Creek at San Luis Bay Drive.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID **37767** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline applied to protect the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three sediment samples exceeded the evaluation guideline applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37767, Copper **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16848
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37767, Copper **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16081
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37767, Copper **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16082
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37767, Copper **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16847
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37767, Copper **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57815
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37767, Copper **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57814
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51575** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51575, Cyfluthrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57821
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51575, Cyfluthrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57820
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51576 **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing

status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51576, Cyhalothrin, Lambda **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57822
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51576, Cyhalothrin, Lambda **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57823
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	51577	Region 3
San Luis Obispo Creek (below Osos Street)		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51577, Cypermethrin	**Region 3**
San Luis Obispo Creek (below Osos Street)	

LOE ID:	57831
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51577, Cypermethrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57832
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53477 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.6 and 3.1 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for the DDD isomer. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53477, DDD (Dichlorodiphenyldichloroethane) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57833
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53477, DDD (Dichlorodiphenyldichloroethane) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57834
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53478 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.6 and 3.1 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for the DDE isomer. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

Line of Evidence (LOE) for Decision ID 53478, DDE (Dichlorodiphenyldichloroethylene) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57844
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53478, DDE (Dichlorodiphenyldichloroethylene) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57845
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53476 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.6 and 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guidelines for the DDT isomer or total DDT. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53476, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57846
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53476, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57911
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53476, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57912
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53476, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57847
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

	for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51578 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51578, Deltamethrin Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57853

Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51578, Deltamethrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57854
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41928** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Ten lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). Zero of 3 sediment samples (pore water) exceeded the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57856
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57855
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16688
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	47690
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Ck at Los Osos Valley Road - 310SLVxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16617
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	47680
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	47736
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Ck at Los Osos Valley Road - 310SLVxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	47664
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16866
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41928, Diazinon **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16687
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42024 **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42024, Dieldrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16757
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42024, Dieldrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16544
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42024, Dieldrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16543
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42024, Dieldrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16758
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42024, Dieldrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57863
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42024, Dieldrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57864
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41839 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of six sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41839, Endrin Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57866
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41839, Endrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57865
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41839, Endrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16608
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41839, Endrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16390
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41839, Endrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16607
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41839, Endrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16391
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 51580 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51580, Esfenvalerate/Fenvalerate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57873
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51580, Esfenvalerate/Fenvalerate **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57872
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51581** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51581, Fenpropathrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57875
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51581, Fenpropathrin **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57874
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37721 **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37721, Lead **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17153
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37721, Lead **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17152
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37721, Lead **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17173
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37721, Lead **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17186
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37721, Lead **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57882
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and

	Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37721, Lead **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57881
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51992	Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51992, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57883
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51992, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57884
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39442 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of four sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39442, Mercury Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	57893
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39442, Mercury **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57892
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39442, Mercury **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17239
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39442, Mercury **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17237
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39442, Mercury **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17250

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39442, Mercury **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17240
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52050 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52050, Methyl Parathion **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57894
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52050, Methyl Parathion **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57895

Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39443 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Three out

of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. However, zero out of four sediment samples exhibited toxicity. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three out of three sediment samples exceeded the evaluation guideline; however, no samples exhibited toxicity. This does not exceed the allowable frequency listed in Table 3.1 and section 3.6 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16884
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	23973
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16885
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16905
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16906
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	23972
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57902
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80337
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57901
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80335
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064

SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80334
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLB - San Luis Creek at San Luis Bay Drive.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57917
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57914
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLB - San Luis Creek at San Luis Bay Drive.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39443, Nickel **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57915
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated

Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID 53479 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 115 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 115 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53479, Nitrogen, Nitrite Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	52024
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53479, Nitrogen, Nitrite **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52040
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53479, Nitrogen, Nitrite **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	49219
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 50 samples exceed the criterion for Nitrite as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

DECISION ID	52094	Region 3
San Luis Obispo Creek (below Osos Street)		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52094, PCBs (Polychlorinated biphenyls)	**Region 3**
San Luis Obispo Creek (below Osos Street)	

LOE ID:	57903
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	
Spatial Representation:	Data were collected at the following station 310SLBxxx (310SLB-San Luis Obispo Creek at San Luis Bay Drive).
Temporal Representation:	The samples were collected on 6/11/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	

DECISION ID 51583 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51583, Permethrin, total **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57904
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51583, Permethrin, total **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57910
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38448** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 149 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Zero of the 149 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38448, Specific Conductivity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11608
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38448, Specific Conductivity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11828
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38448, Specific Conductivity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11792
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38448, Specific Conductivity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52004
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38448, Specific Conductivity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52003
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

appropriate.

QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38146 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 154 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 154 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38146, Temperature, water Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	51934
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38146, Temperature, water **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51948
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38146, Temperature, water **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12736
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38146, Temperature, water **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12502
Pollutant:	Temperature, water

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 2 monitoring sites [310SLB-San Luis Obispo Creek at San Luis Bay Drive, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38146, Temperature, water **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12558
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and

	results are as follows: 0 of 16 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37803**	**Region 3**
San Luis Obispo Creek (below Osos Street)		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Eight LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in sediment samples. Zero of the four sediment samples resulted in a significant toxic effect to one or more test organisms. Eight LOEs summarize water samples. One water sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and four water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in water samples. One of the five water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. When the sample count is summed, the sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four sediment samples and one of the five water samples resulted in a significant toxic effect to one or more test organisms. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	24271
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	24277
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]

Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	24270
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	24276
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/19/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	23973
Pollutant:	Invertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	23972
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57913
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLB - San Luis Creek at San Luis Bay Drive.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57917
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental

Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57914
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLB - San Luis Creek at San Luis Bay Drive.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57915

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57916
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. None of the samples exhibited significant toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once.

	One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLVxxx.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80333
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant

	compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLB - San Luis Creek at San Luis Bay Drive.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80337
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80336
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. None of the samples exhibited significant toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLVxxx.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80335
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLBxxx.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37803, Toxicity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	80334
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SLB - San Luis Creek at San Luis Bay Drive.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID 38288 **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Seven of the 135 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and of the 135 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 135 samples exceed the evaluation guideline for Cold Freshwater Habitat and 6 of the 135 samples exceed the Warm Freshwater Habitat evaluation guideline. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38288, Turbidity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51933
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38288, Turbidity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51918
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38288, Turbidity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51919
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38288, Turbidity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51932
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38288, Turbidity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12487
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/30/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38288, Turbidity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12734
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 2 of 52 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38288, Turbidity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12735
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 2 of 52 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38288, Turbidity — Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	12556
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38288, Turbidity — Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	12557
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38288, Turbidity **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12486
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/30/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37798 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of three sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37798, Zinc **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17757
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37798, Zinc **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17758
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37798, Zinc **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17719
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37798, Zinc **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17734
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37798, Zinc **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57918
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37798, Zinc **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57919
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Luis Obispo Creek (below Osos Street) to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [San Luis Obispo Creek at San Luis Bay Drive - 310SLBxxx]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38147**	**Region 3**
San Luis Obispo Creek (below Osos Street)		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 148 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat and Agricultural Supply, and 4 of the 148 samples exceeded the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 148 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat and Agricultural Supply, and 4 of the 148 samples exceeded the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51971
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51917
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51916
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51991
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51972
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51930
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51931
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52006
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25

Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52042
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52041
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52009
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	52010
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11629
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11829
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11610
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11831
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11832
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH — Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	11809
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH — Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	11810
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11811
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]

Temporal Representation: Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID: 11812

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 59

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 59 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]

Temporal Representation: Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11793
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11626
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11627
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was

	collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11609
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11848
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11847
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11813
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11628
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38147, pH **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11830
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52523 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator and 14 supporting lines of evidence are available to show impacts to aquatic life uses. All three benthic invertebrate samples scored below 40 on the Sothern California IBI and are therefore is below the impairment threshold. This water body segment if also on the CWA Section 303(d) List for Nitrate and Low Dissolved Oxygen.

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies does not satisfy the data quantity requirements of section 3.9 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index and there are is supporting evidence showing pollutant concentrations impacting aquatic life uses in this water body segment. Therefore this water body segment meets the requirement of Section 3.9 of the listing policy for placement on the 303(d) List.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10081
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 15 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	10003
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 41 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48882

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	50
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 40 of 50 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	48873
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 50 of 50 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [Station # 6 West of 101 Bridge, Station # 2 RW4:, Station # 4 RW5, Station # 5 RW 8.2, Station # 7 San Luis Bay Drive at Avila Beach Drive]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	49223
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	115
Number of Exceedances:	81
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 81 of 115 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [RW_4- SLO Creek 75 meters upstream of City WWTP Outfall, RW_5- SLO Creek 50 meters downstream of City WWTP Outfall and Perfumo Creek, RW_8.2 - SLO Creek downstream of South Higuera St. Bridge, Station # 6 West of 101 Bridge, San_Luis_Bay_Drive_Bridge - San Luis Obispo Creek]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of San Luis Obispo Lab is certified by the State of California's Environmental Laboratory Accreditation Program (ELAP). In addition, calibration data for field probes was provided
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12576
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12717
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 59 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12752
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 2 monitoring sites [310SLB-San Luis Obispo Creek at San Luis Bay Drive, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	57819
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	All three of the IBI scores are 39 or below and are therefore are below the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in this waterbody resulting in the collection of more than one sample at the San Luis Obispo Creek station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the 2007 sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The three RWB samples included in this assessment have the following IBI scores: The 2007 sample IBI score was 17, the 2009 sample IBI score was 14 and the 2010 sample IBI score was 29.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.

Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310SLBxxx-San Luis Obispo Creek at San Luis Bay Drive.
Temporal Representation:	Surveys done on April 12, 2007 and May 4, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51759
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 40 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51760
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 13 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51967
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 30 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51968
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 11 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51913
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52523, Benthic Community Effects **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51912
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 49951 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-four of 89 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 25 samples exceed the water quality objective for non-contact recreation. The sample size for the evaluation

guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-four of 89 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49951, Escherichia coli (E. coli) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51990
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 16 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLV-San Luis Obispo Creek at Los Osos Valley Road, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49951, Escherichia coli (E. coli) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51989
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 11 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49951, Escherichia coli (E. coli) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11850
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49951, Escherichia coli (E. coli) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	11849
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 7 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as

	stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39741 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-two lines of evidence are available in the administrative record to assess this pollutant. Ninety of the 269 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. One of the 269 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ninety of the 269 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	12718
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12719
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 16 of 59 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12720
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 16 of 59 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12752
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 2 monitoring sites [310SLB-San Luis Obispo Creek at San Luis Bay Drive, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12753
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 2 monitoring sites [310SLB-San Luis Obispo Creek at San Luis Bay Drive, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12754
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 10 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 2 monitoring sites [310SLB-San Luis Obispo Creek at San Luis Bay Drive, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12592
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation: Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID: 12593

Pollutant: Dissolved oxygen saturation
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 16
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Oxygen, Saturation.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation: Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	49223
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	115
Number of Exceedances:	81
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 81 of 115 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [RW_4- SLO Creek 75 meters upstream of City WWTP Outfall, RW_5- SLO Creek 50 meters downstream of City WWTP Outfall and Perfumo Creek, RW_8.2 - SLO Creek downstream of South Higuera St. Bridge, Station # 6 West of 101 Bridge, San_Luis_Bay_Drive_Bridge - San Luis Obispo Creek]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of San Luis Obispo Lab is certified by the State of California's Environmental Laboratory Accreditation Program (ELAP). In addition, calibration data for field probes was provided
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	49241
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	115
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 115 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 5 monitoring sites [RW_4- SLO Creek 75 meters upstream of City WWTP Outfall, RW_5- SLO Creek 50 meters downstream of City WWTP Outfall and Perfumo Creek, RW_8.2 - SLO Creek downstream of South Higuera St. Bridge, Station # 6 West of 101 Bridge, San_Luis_Bay_Drive_Bridge - San Luis Obispo Creek]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of San Luis Obispo Lab is certified by the State of California's Environmental Laboratory Accreditation Program (ELAP). In addition, calibration data for field probes was provided
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12484
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 10 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 2 monitoring sites [310SLB-San Luis Obispo Creek at San Luis Bay Drive, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]

Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12591
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12576
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	12717
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 1 of 59 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51915
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51912
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51913
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51914
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51766
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51765
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51764
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39741, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	51763
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (below Osos Street) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (below Osos Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42609 **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42609, Anthracene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15605
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42609, Anthracene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15610
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42609, Anthracene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15623
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42609, Anthracene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15606
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42620 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to

aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42620, Benzo(a)anthracene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15559
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42620, Benzo(a)anthracene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15741

Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42620, Benzo(a)anthracene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15740
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42620, Benzo(a)anthracene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15546
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was

	collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42610 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42610, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	15358
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42610, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	15371
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42610, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	15407
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42610, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15408
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42443** **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42443, Chrysene (C1-C4) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16017
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42443, Chrysene (C1-C4) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16018
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42443, Chrysene (C1-C4) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15999
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42443, Chrysene (C1-C4) **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	15998
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support

	and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41840**	**Region 3**
San Luis Obispo Creek (below Osos Street)		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41840, Fluoranthene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16459
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41840, Fluoranthene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16844
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41840, Fluoranthene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16858
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41840, Fluoranthene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16460
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID 41913 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41913, Fluorene Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	17341
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41913, Fluorene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17340
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41913, Fluorene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16570
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41913, Fluorene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16569
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41880 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the

2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41880, Naphthalene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17074
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41880, Naphthalene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17304
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41880, Naphthalene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17303
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41880, Naphthalene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17075
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41842 Region 3

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41842, Phenanthrene Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	16972
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41842, Phenanthrene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17039
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41842, Phenanthrene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17040
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41842, Phenanthrene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	16971
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41884 **Region 3**

San Luis Obispo Creek (below Osos Street)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41884, Pyrene — Region 3

San Luis Obispo Creek (below Osos Street)

LOE ID:	17102
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41884, Pyrene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17089
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLB-San Luis Obispo Creek at San Luis Bay Drive]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41884, Pyrene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17948
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41884, Pyrene **Region 3**

San Luis Obispo Creek (below Osos Street)

LOE ID:	17934
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Luis Obispo Creek (Below W Marsh Street) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (Below W Marsh Street) was collected at 1 monitoring site [310SLV-San Luis Obispo Creek at Los Osos Valley Road]
Temporal Representation:	Data was collected on a single day 3/26/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Davenport Creek**
Water Body ID: **CAR310240201999022511592 8**
Water Body Type: **River & Stream**

DECISION ID **39508** **Region 3**
Davenport Creek

Pollutant: **Chlorophyll-a**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39508, Chlorophyll-a **Region 3**
Davenport Creek

LOE ID: 14696

Pollutant: Chlorophyll-a
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39509**	**Region 3**
Davenport Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed.

Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess these pollutants. The single sample exceeds the dissolved oxygen water quality objective for Cold Freshwater Habitat and the general water quality objective for oxygen saturation (applied as a single sample maximum). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample exceeds the dissolved oxygen water quality objective for Cold Freshwater Habitat and this does not exceed the exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39509, Oxygen, Dissolved **Region 3**

Davenport Creek

LOE ID:	14697
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39509, Oxygen, Dissolved **Region 3**

Davenport Creek

LOE ID:	14698
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	38939	Region 3
Davenport Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38939, Temperature, water	**Region 3**
Davenport Creek	

LOE ID:	14730
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver

Data Reference:	Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature. Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38940**	**Region 3**
Davenport Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38940, Turbidity **Region 3**

Davenport Creek

LOE ID:	14729
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38991** **Region 3**

Davenport Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for Agricultural Supply, Municipal and Domestic Supply, Non-Contact Recreation, Contact Recreation, and Cold Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives for Agricultural Supply, Municipal and Domestic Supply, Non-Contact Recreation, Contact Recreation, and Cold Freshwater Habitat. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38991, pH — Region 3

Davenport Creek

LOE ID:	14712
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38991, pH **Region 3**

Davenport Creek

LOE ID:	14713
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly.

	CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38991, pH **Region 3**

Davenport Creek

LOE ID:	14715
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38991, pH **Region 3**

Davenport Creek

LOE ID:	14714
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38991, pH **Region 3**

Davenport Creek

LOE ID:	14699
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Davenport Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Davenport Creek was collected at 1 monitoring site [310SLD - Davenport Creek at Broad St.]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Prefumo Creek**
Water Body ID: **CAR3102401220020124125422**
Water Body Type: **River & Stream**

DECISION ID **40805** **Region 3**
Prefumo Creek

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Eight of 27 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 0 of 27 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40805, Fecal Coliform **Region 3**
Prefumo Creek

LOE ID: 51338

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40805, Fecal Coliform **Region 3**

Prefumo Creek

LOE ID:	51335
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40805, Fecal Coliform **Region 3**

Prefumo Creek

LOE ID:	10813
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40805, Fecal Coliform **Region 3**

Prefumo Creek

LOE ID:	10771
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40594** **Region 3**

Prefumo Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Ten lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Five LOEs summarize dissolved oxygen data in which 41 of the 77 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-one of the 77 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved **Region 3**

Prefumo Creek

LOE ID:	12608
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and

	Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved **Region 3**

Prefumo Creek

LOE ID:	12628
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Prefumo Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 8/20/2002-8/21/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved — Region 3

Prefumo Creek

LOE ID:	12609
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 9 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved — Region 3

Prefumo Creek

LOE ID:	14661
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved **Region 3**

Prefumo Creek

LOE ID:	48587
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 31 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved **Region 3**

Prefumo Creek

LOE ID:	48585
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 23 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved **Region 3**

Prefumo Creek

LOE ID:	14647

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved **Region 3**

Prefumo Creek

LOE ID:	12627
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Prefumo Creek to determine beneficial use support and results are as follows:

	1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 8/20/2002-8/21/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved **Region 3**

Prefumo Creek

LOE ID:	51031
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40594, Oxygen, Dissolved **Region 3**

Prefumo Creek

LOE ID:	51030
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40663** **Region 3**

Prefumo Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 78 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of the 78 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40663, Turbidity **Region 3**

Prefumo Creek

LOE ID:	51033
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40663, Turbidity **Region 3**

Prefumo Creek

LOE ID:	14681
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40663, Turbidity **Region 3**

Prefumo Creek

LOE ID:	48593

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 9 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40663, Turbidity **Region 3**

Prefumo Creek

LOE ID:	12625
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41353**	**Region 3**
Prefumo Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Natural Sources
TMDL Name:	San Luis Obispo Creek Nutrients
TMDL Project Code:	25
Date TMDL Approved by USEPA:	01/10/2007
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. Three of the 39 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. Fourteen of the 39 nitrate samples and 22 of the 64 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Twenty-three of the 24 nitrate samples and 49 of the 52 nitrate/nitrite samples exceed the Central Coast Region evaluation guideline for Cold Freshwater Habitat. In addition, the following is a summary of the supporting evidence for presence of and risk for eutrophic conditions:

1) Dissolved oxygen for this water body ranged from 4.73 mg/L to 11.75 mg/L , often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the Warm Freshwater Habitat water quality objective of 5.0 mg/L.
2) Water column chlorophyll a concentration ranged up to 21.2 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 2.85 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).

4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 64 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2, but not the warm water screening threshold of 80 grams/m2 (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 161 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2, but not the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of the 39 nitrate samples and 22 of the 64 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The San Luis Obispo Nitrate TMDL has been approved by USEPA on 01/10/2007.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	15264
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).

Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	9905
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	48769
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	48770
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California, U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	48771
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	48583
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 37 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	9906
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 14 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	48584

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 12 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	50998
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	51017
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	51029
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 12 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	51320
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41353, Nitrate **Region 3**

Prefumo Creek

LOE ID:	51319
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41344**	**Region 3**
Prefumo Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 64 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 80 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41344, Ammonia **Region 3**

Prefumo Creek

LOE ID:	9891
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41344, Ammonia **Region 3**

Prefumo Creek

LOE ID:	15263
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41344, Ammonia **Region 3**

Prefumo Creek

LOE ID:	14708
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41344, Ammonia **Region 3**

Prefumo Creek

LOE ID:	48747
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]

Temporal Representation:	Data was collected over the time period 4/12/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41344, Ammonia **Region 3**

Prefumo Creek

LOE ID:	48734
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41344, Ammonia **Region 3**

Prefumo Creek

LOE ID:	9890
Pollutant:	Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41344, Ammonia **Region 3**

Prefumo Creek

LOE ID:	51317
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41344, Ammonia **Region 3**

Prefumo Creek

LOE ID:	51015
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49197	Region 3
Prefumo Creek		

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49197, Azinphos-methyl (Guthion)	**Region 3**
Prefumo Creek	

LOE ID:	56876
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**40913**	**Region 3**
Prefumo Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 20 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40913, Boron **Region 3**

Prefumo Creek

LOE ID:	50985
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40913, Boron **Region 3**

Prefumo Creek

LOE ID:	9892
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40725**	**Region 3**
Prefumo Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 20 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40725, Chloride **Region 3**

Prefumo Creek

LOE ID:	9904
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40725, Chloride **Region 3**

Prefumo Creek

LOE ID:	50986
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40884** **Region 3**

Prefumo Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 75 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 75 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40884, Chlorophyll-a **Region 3**

Prefumo Creek

LOE ID:	51016
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40884, Chlorophyll-a **Region 3**

Prefumo Creek

LOE ID:	48748
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40884, Chlorophyll-a **Region 3**

Prefumo Creek

LOE ID:	9920
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40884, Chlorophyll-a **Region 3**

Prefumo Creek

LOE ID:	14709
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **47890** **Region 3**

Prefumo Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. One sediment sample (pore water) result was not used in this decision because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47890, Chlorpyrifos **Region 3**

Prefumo Creek

LOE ID:	48749
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47890, Chlorpyrifos **Region 3**

Prefumo Creek

LOE ID:	47693
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek @ Calle Joaquin - 310PRExxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47890, Chlorpyrifos **Region 3**

Prefumo Creek

LOE ID:	56878
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 49198 Region 3

Prefumo Creek

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49198, Demeton — Region 3

Prefumo Creek

LOE ID:	56879
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**47178**	**Region 3**
Prefumo Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47178, Diazinon **Region 3**

Prefumo Creek

LOE ID:	56881
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47178, Diazinon **Region 3**

Prefumo Creek

LOE ID:	48767
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to

	determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon, Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47178, Diazinon **Region 3**

Prefumo Creek

LOE ID:	47735
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not

	be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek @ Calle Joaquin - 310PRExxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49199 Region 3

Prefumo Creek

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49199, Dichlorvos Region 3

Prefumo Creek

LOE ID:	56882
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**49200**	**Region 3**
Prefumo Creek		

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49200, Dimethoate **Region 3**

Prefumo Creek

LOE ID:	56884
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49200, Dimethoate **Region 3**

Prefumo Creek

LOE ID:	56883
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**49201**	**Region 3**
Prefumo Creek		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49201, Disulfoton **Region 3**

Prefumo Creek

LOE ID:	56886
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **47356** **Region 3**

Prefumo Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E.coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Four of 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47356, Escherichia coli (E. coli) **Region 3**

Prefumo Creek

LOE ID:	51336
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as

	stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49203	Region 3
Prefumo Creek		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49203, Ethoprop	**Region 3**
Prefumo Creek	

LOE ID:	56887

Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**49204**	**Region 3**
Prefumo Creek		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection and zero of the two sample exceed the evaluation guideline used to interpret the water quality objective for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is

needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49204, Malathion **Region 3**

Prefumo Creek

LOE ID:	56888
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49204, Malathion **Region 3**

Prefumo Creek

LOE ID:	48768
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	California Department of Fish and Game Hazard Assessment Criterion is 0.43 ug/L for criterion maximum concentration (CMC) (CDFG, 1998)
Guideline Reference:	Hazard Assessment of the Insecticide Malathion to Aquatic Life in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response Administrative Report 98-2
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49206** **Region 3**

Prefumo Creek

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life

protection and zero of the two sample exceed the evaluation guideline used to interpret the water quality objective for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49206, Methidathion **Region 3**

Prefumo Creek

LOE ID:	56891
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49206, Methidathion **Region 3**

Prefumo Creek

LOE ID:	56890
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49207** **Region 3**

Prefumo Creek

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection and zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49207, Methyl Parathion **Region 3**

Prefumo Creek

LOE ID:	56893
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River

System

Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49207, Methyl Parathion **Region 3**

Prefumo Creek

LOE ID:	56892
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49208** **Region 3**

Prefumo Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural supply uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49208, Nitrogen, Nitrite **Region 3**

Prefumo Creek

LOE ID:	51000
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 49209 Region 3

Prefumo Creek

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49209, Parathion Region 3

Prefumo Creek

LOE ID:	56901

Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria, United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**49210**	**Region 3**
Prefumo Creek		

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection and zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49210, Phorate **Region 3**

Prefumo Creek

LOE ID:	56908
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49210, Phorate **Region 3**

Prefumo Creek

LOE ID:	56907
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected over the time period 8/20/2009-9/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49211** **Region 3**

Prefumo Creek

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection and zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49211, Phosmet **Region 3**

Prefumo Creek

LOE ID:	56909
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected on a single day 8/20/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49211, Phosmet **Region 3**

Prefumo Creek

LOE ID:	56910
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [Prefumo Creek - 310PRE]
Temporal Representation:	Data was collected on a single day 8/20/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**40836**	**Region 3**
Prefumo Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 20 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40836, Sodium **Region 3**

Prefumo Creek

LOE ID:	51014
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40836, Sodium **Region 3**

Prefumo Creek

LOE ID:	9907
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40739** **Region 3**

Prefumo Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 63 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 63 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40739, Specific Conductivity **Region 3**

Prefumo Creek

LOE ID:	10772
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40739, Specific Conductivity **Region 3**

Prefumo Creek

LOE ID:	48750
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40739, Specific Conductivity — Region 3

Prefumo Creek

LOE ID:	50987
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40595 — Region 3

Prefumo Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 80 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 80 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40595, Temperature, water **Region 3**

Prefumo Creek

LOE ID:	51316
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40595, Temperature, water **Region 3**

Prefumo Creek

LOE ID:	12626
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40595, Temperature, water **Region 3**

Prefumo Creek

LOE ID:	12643
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Prefumo Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 8/20/2002-8/21/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40595, Temperature, water **Region 3**

Prefumo Creek

LOE ID:	48594
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40595, Temperature, water **Region 3**

Prefumo Creek

LOE ID:	14682
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40077 Region 3

Prefumo Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 75 samples exceed the water quality objectives for Agriculture, Cold Freshwater Habitats, Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 75 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40077, pH Region 3

Prefumo Creek

LOE ID:	14679
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	14664
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	14663
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH — Region 3

Prefumo Creek

LOE ID:	14662
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH — Region 3

Prefumo Creek

LOE ID:	14665
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	48592
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	48591
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	48590

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	48589
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	48588
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40077, pH — Region 3

Prefumo Creek

LOE ID:	10773
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH — Region 3

Prefumo Creek

LOE ID:	10774
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	10775
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	10829
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	10830
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	51321
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the

	criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	51339
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	51337
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	51001
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the

	criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40077, pH **Region 3**

Prefumo Creek

LOE ID:	51032
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41596	Region 3
Prefumo Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Three LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and four additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in sediment samples. One of the five sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Five LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twelve water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, sixteen total samples are available to assess toxic effects in water samples. Three of the sixteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 16 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

LOE ID:	24451
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41596, Toxicity **Region 3**
Prefumo Creek

LOE ID:	24446
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41596, Toxicity **Region 3**

Prefumo Creek

LOE ID:	24450
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41596, Toxicity **Region 3**

Prefumo Creek

LOE ID:	24448
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Prefumo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Prefumo Creek was collected at 1 monitoring site [310PRE-Prefumo Creek at Calle Joaquin]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41596, Toxicity **Region 3**

Prefumo Creek

LOE ID:	56917
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell

	count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310PRE.
Temporal Representation:	The sample was collected in September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41596, Toxicity **Region 3**

Prefumo Creek

LOE ID:	56916
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Two of the eleven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia and growth of Pimephales promelas (9/25/08 and 1/19/10).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.

Guideline Reference:

Spatial Representation: The samples were collected at 310PRE-Prefumo Creek at Calle Joaquin.
Temporal Representation: The samples were collected from 2007 to 2010.
Environmental Conditions:
QAPP Information: The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41596, Toxicity **Region 3**

Prefumo Creek

LOE ID: 56915

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 3
Number of Exceedances: 1

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity to Hyalella Azteca growth.
Data Reference: Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:

Spatial Representation: The samples were collected at 310PRE-Prefumo Creek at Calle Joaquin.
Temporal Representation: The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:
QAPP Information: The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41596, Toxicity **Region 3**

Prefumo Creek

LOE ID: 56918

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Sediment
Fraction: None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310PRExxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Luis Obispo Creek (above Osos Street)**
Water Body ID: **CAR310240111199808241431 23**
Water Body Type: **River & Stream**

DECISION ID	38529	Region 3
San Luis Obispo Creek (above Osos Street)		

Pollutant: **Fecal Coliform**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Other
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

The extent of this water segment was revised (re-mapped) for the 2014 assessment cycle. This resulted in the disassociation of station 310SLM from this segment. This decision to delist is a result of that mapping change because the station with the majority of the water quality exceedances is now associated with a different water segment.

Six lines of evidence are available in the administrative record to assess this pollutant. Note that LOEs 11851 and 11856 summarize data from two stations, one of which is not located in this newly mapped water segment. These LOEs are not included in this assessment and new LOEs were created that contain data for station 310SLC only data (see LOEs 81180 and 81179). Therefore, LOE 11851 is replaced by LOE 81179 which correctly shows that one of the 11 samples exceed the water quality objective for Water Contact Recreation uses (i.e. swimming, wading etc.) and LOE 11856 is replaced by LOE 81180 which correctly shows that zero of 11 samples exceed the water quality objective for Non-contact Recreation uses. When this data is combined with the data in LOEs 51927 and 51943 the following assessment is correct for this water segment. Three of 20 samples exceed the water quality objective for Water Contact Recreation uses and zero of 20 samples exceed the water quality objective for Non-contact Recreation uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The previous decision to add this water segment to the 303(d) List was based solely on data from a station that is not located in this water segment.
4. In this water segment, three of 20 samples exceed the water quality objective for water contact recreation (i.e. swimming, wading etc.) and zero of 20 samples exceed the water quality objective for non-contact recreation. These do not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because
1. The previous decision to add this water segment to the 303(d) List was based solely on data from a station that is not located in this water segment.
2.Applicable water quality standards for the pollutant are not being exceeded in this newly mapped segment.

Line of Evidence (LOE) for Decision ID 38529, Fecal Coliform **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	11866
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	26
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 5 of 26 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38529, Fecal Coliform **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	11851
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 12 of 26 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38529, Fecal Coliform **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51927
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38529, Fecal Coliform **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51943
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38529, Fecal Coliform **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	81179
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38529, Fecal Coliform — Region 3

San Luis Obispo Creek (above Osos Street)

LOE ID:	81180
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 34381 — Region 3

San Luis Obispo Creek (above Osos Street)

Pollutant:	**Nitrate**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Other
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant was removed from the CWA section 303(d) List in the 2012 assessment cycle after the mapped reach was revised and stations that have elevated nitrate concentrations are no longer included in this reach. Seventeen lines of evidence are available in the administrative record to assess this pollutant. Note that LOE 1911 summarized data for stations located in this reach and also located in the downstream reach. The stations in the downstream reach account for all of the exceedances of the water quality objective and therefore are not included in this assessment. The following is a summary of the data for this segment, ignoring data from the station that is located in the downstream segment. Zero of the 45 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. Zero of the 19 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat beneficial uses. None of the 20 nitrate/nitrite samples exceeds the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 20 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 45 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. Zero of the 19 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat beneficial uses. None of the 20 nitrate/nitrite samples exceeds the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 20 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. These do not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded in this reach of San Luis Obispo Creek. The listing was incorrectly assigned to this reach prior to 2006.

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51614
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51615
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51589
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51963
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51962
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51910
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51925
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	48913
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Station # 1 Fox Hollow (Previously RW1)]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	48900

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Station # 1 Fox Hollow (Previously RW1)]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	48898
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Station # 1 Fox Hollow (Previously RW1)]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	48883
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Station # 1 Fox Hollow (Previously RW1)]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	48874
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Station # 1 Fox Hollow (Previously RW1)]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	10036
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	48864
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Station # 1 Fox Hollow (Previously RW1)]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	48872
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Station # 1 Fox Hollow (Previously RW1)]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	10035
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34381, Nitrate **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	1911
Pollutant:	Nitrate as Nitrate (NO3)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	66
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Thirty-five out of 66 samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2 (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from four sites. Exceedances were detected in samples collected from two of the four sites (310SLB, 310SLV).
Temporal Representation:	Samples were collected from April 2001 through March 2003.
Environmental Conditions:	Water body is located in Estero Bay Hydrologic Unit, Point Buchon hydrologic area, San Luis Obispo Creek Hydrologic Subarea. The monitoring sites are located at San Luis Obispo Creek at San Luis Bay Drive (310SLB), San Luis Obispo Creek at Cuesta Park (310SLC), San Luis Obispo Creek at Mission Plaza (310SLM), San Luis Obispo Creek at Los Osos Valley Road (310SLV). The Basin Plan differentiates beneficial uses for this water body depending on whether it is above or below W. Marsh St. Two of the sites are located above W. Marsh St (310SLM and 310SLC) and two are located below W. Marsh St. (310SLV and 310SLB). The sites with exceedances are located below W. Marsh St.
QAPP Information:	CCAMP, SWAMP QAPP.
QAPP Information Reference(s):	

DECISION ID **39606** **Region 3**

San Luis Obispo Creek (above Osos Street)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Seven lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 35 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 45 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 35 samples exceed the water quality objective for unionized ammonia and zero of the 45 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39606, Ammonia **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51602
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39606, Ammonia **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51946
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39606, Ammonia **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51908
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39606, Ammonia **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	48862
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Station # 1 Fox Hollow (Previously RW1)]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39606, Ammonia **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	10019
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39606, Ammonia **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	10020
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39606, Ammonia **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	10033
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52521 Region 3

San Luis Obispo Creek (above Osos Street)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. One line of evidence is available showing that 1 of the two samples was not meeting water quality standards. Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in

biological populations and/or communities as compared to reference site(s) using the SoCal IBI.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52521, Benthic Community Effects **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	57811
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the 2 IBI scores in this water body was 39 or lower and therefore was below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310SLCxxx-San Luis Creek at Cuesta Park
Temporal Representation:	Surveys done on April 14, 2009 and June 7, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

DECISION ID 37655 **Region 3**

San Luis Obispo Creek (above Osos Street)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37655, Boron **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51578
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37655, Boron **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	10034
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	53473	Region 3
San Luis Obispo Creek (above Osos Street)		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53473, Chloride	**Region 3**
San Luis Obispo Creek (above Osos Street)	

LOE ID:	51579
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38145** **Region 3**

San Luis Obispo Creek (above Osos Street)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 36 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 36 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38145, Chlorophyll-a **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51603
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38145, Chlorophyll-a **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51947
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38145, Chlorophyll-a **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	10049
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38145, Chlorophyll-a **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	10050
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Chlorophyll a.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLM-San Luis Obispo Creek at Mission Plaza, 310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49894 Region 3

San Luis Obispo Creek (above Osos Street)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Two of nine samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of nine samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49894, Escherichia coli (E. coli) **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51928
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53475	Region 3
San Luis Obispo Creek (above Osos Street)		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the water quality objective for agricultural supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53475, Nitrogen, Nitrite	**Region 3**
San Luis Obispo Creek (above Osos Street)	

LOE ID:	51591
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53475, Nitrogen, Nitrite **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	48915
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrite as N.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Station # 1 Fox Hollow (Previously RW1)]
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	There is no QAPP written specifically for this project. However, The City of SLO's Lab is certified with the Department of Public Health in accordance with the CWC section 13176. In addition QC data are provided with laboratory analyses and QC procedures
QAPP Information Reference(s):	

DECISION ID	38331	Region 3
San Luis Obispo Creek (above Osos Street)		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of the 61 samples exceeded the water quality objectives for dissolved oxygen in Cold and Warm Freshwater Habitats, therefore these uses are not supported. However, all 24 exceedances occurred at "Fox Hollow" and there is no quality assurance plan for this monitoring data. In addition, the site description in the LOE for Fox Hollow states that the location is 'pool habitat'. If this dissolved oxygen condition is accurate for Fox Hollow then it appears to be a localized condition as the SWAMP program data collected less than a mile downstream (at Cuesta Park) has zero exceedances of the water quality objectives. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Staff do not recommend listing this water segment based solely on the data collected from Fox Hollow because of the lack of quality assurance information and the contrast with data collected nearby. Further data and information are needed regarding the environmental conditions at the Fox Hollow location before it can be determined if these data are representative of the creek and are accurate. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 37 samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Although all 24 of the samples collected from Fox Hollow exceed the water quality objectives, the lack of quality assurance information and the contrast with data collected nearby indicate that these data may not meet the requirement of section 6.1.5 of the Listing Policy and therefore should not be the sole basis of a decision to add this water segment to the 303(d) List. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved	Region 3
San Luis Obispo Creek (above Osos Street)	

LOE ID:	49222
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 24 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Fox_Hollow - SLO Creek at Fox Hollow Road, also known as Station 1 (previously RW1), also known as Fox Hollow (400 meters upstream of US 101 overcrossing, just south of Fox Hollow Rd). The Fox Hollow site is accessible through City owned property approximately 100 meters south of Fox Hollow Rd. just behind the Police firing range. The creek cuts into the left bank just before a slide that has created a pool. Substrate is clay, sand, gravel, and rock. The canopy is composed mostly of oaks and sycamores. Seasonal grazing allow cattle access here winter and spring.
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	There appears to be a localized effect because less than one mile downstream, data do not show any low dissolved oxygen measurements. Also note that the station description states that this location is 'pool' habitat'.
QAPP Information:	There is no QAPP. However, calibration data for field probes was provided.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12503
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12542
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 1 monitoring site [310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 8/19/2002-8/20/2002. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12541
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 1 monitoring site [310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 8/19/2002-8/20/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12540
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 1 monitoring site [310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 8/19/2002-8/20/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12539
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 1 monitoring site [310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 8/19/2002-8/20/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12505
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12521
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	49220
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 24 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [Fox_Hollow - SLO Creek at Fox Hollow Road, also known as Station 1 (previously RW1), also known as Fox Hollow (400 meters upstream of US 101 overcrossing, just south of Fox Hollow Rd). The Fox Hollow site is accessible through City owned property approximately 100 meters south of Fox Hollow Rd. just behind the Police firing range. The creek cuts into the left bank just before a slide that has created a pool. Substrate is clay, sand, gravel, and rock. The canopy is composed mostly of oaks and sycamores. Seasonal grazing allow cattle access here winter and spring.
Temporal Representation:	Data was collected over the time period 7/18/2010-8/16/2010.
Environmental Conditions:	There appears to be a localized effect because less than one mile downstream, data do not show any low dissolved oxygen measurements. Also note that the station description states that this location is 'pool' habitat'.
QAPP Information:	There is no QAPP. However, calibration data for field probes was provided.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12504
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51616
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51617
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51964
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38331, Oxygen, Dissolved **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51965
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53474	Region 3
San Luis Obispo Creek (above Osos Street)		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53474, Sodium	**Region 3**
San Luis Obispo Creek (above Osos Street)	

LOE ID:	51601
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0

	of 9 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38466 Region 3

San Luis Obispo Creek (above Osos Street)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 35 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 35 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38466, Specific Conductivity **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51588
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38466, Specific Conductivity **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	11867
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37820 Region 3

San Luis Obispo Creek (above Osos Street)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 47 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 47 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37820, Temperature, water **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12538
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37820, Temperature, water **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12573
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 1 monitoring site [310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 8/19/2002-8/20/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37820, Temperature, water **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	57816
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 10 grab samples collected exceeded the evaluation guideline for temperature in this water body.
Data Reference:	Nutrient Numeric Endpoint Study for San Luis Obispo Creek, July - August 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected at Station 1 (previously RW1), also known as Fox Hollow(400 meters upstream of US 101 overcrossing, just south of Fox Hollow Rd). The Fox Hollow site is accessible through City owned property approximately 100 meters south of Fox Hollow Rd. just behind the Police firing range. The creek cuts into the left bank just before a slide that has created a pool. Substrate is clay, sand, gravel, and rock. The canopy is composed mostly of oaks and sycamores. Seasonal grazing allow cattle access here winter and spring.
Temporal Representation:	Samples were collected approximately weekly in July and August of 2010.
Environmental Conditions:	
QAPP Information:	QAPP is included in the document titled 'City of San Luis Obispo Numeric Nutrient Endpoint Study for San Luis Obispo Creek July August 2010'.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37820, Temperature, water **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51907
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38324 Region 3

San Luis Obispo Creek (above Osos Street)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 35 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 0 of the 35 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 35 samples exceed the evaluation guideline for both Cold and Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38324, Turbidity Region 3

San Luis Obispo Creek (above Osos Street)

LOE ID:	51906
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38324, Turbidity **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51983
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38324, Turbidity **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12524
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38324, Turbidity **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	12523
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38326 **Region 3**

San Luis Obispo Creek (above Osos Street)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 35 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat and Agricultural Supply. Three of the 35 samples exceeded the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 35 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat and Agricultural Supply. Three of the 35 samples exceeded the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	11589
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 3 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	11868
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38326, pH — Region 3

San Luis Obispo Creek (above Osos Street)

LOE ID:	11587
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 3 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38326, pH — Region 3

San Luis Obispo Creek (above Osos Street)

LOE ID:	11588
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 3 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	11869
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	11590
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Luis Obispo Creek (above Marsh St) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Marsh St) was collected at 2 monitoring sites [310SLC-San Luis Obispo Creek at Cuesta Park, 310SLM-San Luis Obispo Creek at Mission Plaza]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51929
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51926
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51966
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51944
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51600
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38326, pH **Region 3**

San Luis Obispo Creek (above Osos Street)

LOE ID:	51618
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Luis Obispo Creek (above Osos Street) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luis Obispo Creek (above Osos Street) was collected at 1 monitoring site [310SLC-San Luis Obispo Creek at Cuesta Park]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Stenner Creek**
Water Body ID: **CAR3102401020020124145945**
Water Body Type: **River & Stream**

DECISION ID **36645** **Region 3**
Stenner Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	San Luis Obispo Creek Pathogen
TMDL Project Code:	89
Date TMDL Approved by USEPA:	09/23/2005
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Fourteen of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 27 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The San Luis Obispo Creek Pathogen TMDL has been approved by USEPA on 09/23/2005.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36645, Fecal Coliform **Region 3**
Stenner Creek

LOE ID: 52514

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36645, Fecal Coliform **Region 3**

Stenner Creek

LOE ID:	52511
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36645, Fecal Coliform **Region 3**

Stenner Creek

LOE ID:	10832
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36645, Fecal Coliform **Region 3**

Stenner Creek

LOE ID:	10831
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 8 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37251 **Region 3**

Stenner Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 27 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 27 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the water quality objective for unionized ammonia and zero of the 27 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37251, Ammonia **Region 3**

Stenner Creek

LOE ID:	9921
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37251, Ammonia **Region 3**

Stenner Creek

LOE ID:	9922
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37251, Ammonia **Region 3**

Stenner Creek

LOE ID:	52621
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37251, Ammonia **Region 3**

Stenner Creek

LOE ID:	52358
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**52759**	**Region 3**
Stenner Creek		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. Both samples exceeded the water quality objective, but they were collected at the same station. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Both samples scored 39 or lower on the SoCal IBI which indicates poor water quality for this area. However, they were both collected at the same location and this information is insufficient to determine with the power and confidence of the Listing Policy if standards are not met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 52759, Benthic Community Effects **Region 3**

Stenner Creek

LOE ID:	58806
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores in this water body were 39 or lower and therefore below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310SCNxxx-Stenner Creek at Nipomo Street
Temporal Representation:	Surveys done on May 4, 2009 and May 21, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

DECISION ID **37253** **Region 3**

Stenner Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 20 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37253, Boron **Region 3**

Stenner Creek

LOE ID:	52585
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37253, Boron **Region 3**

Stenner Creek

LOE ID:	9923
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36990	Region 3
Stenner Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 20 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36990, Chloride	**Region 3**
Stenner Creek	

LOE ID:	9937
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36990, Chloride **Region 3**

Stenner Creek

LOE ID:	52586
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39428 Region 3

Stenner Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39428, Chlorophyll-a Region 3

Stenner Creek

LOE ID:	52622
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39428, Chlorophyll-a **Region 3**

Stenner Creek

LOE ID:	12644
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48916**	**Region 3**
Stenner Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample (pore water) will not be used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported

using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero sediment samples (pore water) exceeded the aquatic life water quality objective. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48916, Chlorpyrifos **Region 3**

Stenner Creek

LOE ID:	47700
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier

et al., 2005).

Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [Stenner Creek at Nipomo Street - 310SCNxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48916, Chlorpyrifos **Region 3**

Stenner Creek

LOE ID:	47722
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [Stenner Creek at Nipomo Street - 310SCNxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **47359** **Region 3**

Stenner Creek

Pollutant: **Diazinon**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample (pore water) did not exceed the evaluation guideline (Finlayson, 2004). This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy, nor will pore water results be the sole basis for any decision. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47359, Diazinon **Region 3**

Stenner Creek

LOE ID:	47641
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.

Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [Stenner Creek at Nipomo Street - 310SCNxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47359, Diazinon **Region 3**

Stenner Creek

LOE ID:	47694
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [Stenner Creek at Nipomo Street - 310SCNxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	37757	Region 3
Stenner Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. These beneficial uses are fully supported. The most recent 13 samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Thirteen of the 13 samples exceed the evaluation guideline however, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Supporting evidence (showing a lack of eutrophic conditions) based on measured values from the stream are summarized below. 1. Dissolved oxygen measurements for this water body ranged from 8.89 mg/L to 12.83 mg/L, never exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. The dissolved oxygen upper screening level of 13.0 mg/L (R3 NNE Technical Report, 2010) was never exceeded. 2. The percent cover of floating algal mats has always been reported as 0% in the creek, with no station ever having algal cover exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3. Water column chlorophyll a concentrations ranged from 3.51 and peaked at 9.70 ug/L, never exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Thirteen of the 13 samples exceed the evaluation guideline however, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations).

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded and there is no supporting evidence indicating high risk for, or occurrence of, eutrophication.

Line of Evidence (LOE) for Decision ID 37757, Nitrate **Region 3**

Stenner Creek

LOE ID:	9938
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37757, Nitrate **Region 3**

Stenner Creek

LOE ID:	9939

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37757, Nitrate **Region 3**

Stenner Creek

LOE ID:	52640
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to

	determine beneficial use support and results are as follows: 13 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37757, Nitrate **Region 3**

Stenner Creek

LOE ID:	52604
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37757, Nitrate **Region 3**

Stenner Creek

LOE ID:	52603
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37757, Nitrate **Region 3**

Stenner Creek

LOE ID:	52361
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37757, Nitrate **Region 3**

Stenner Creek

LOE ID:	52623
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37757, Nitrate **Region 3**

Stenner Creek

LOE ID:	52360
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53505** **Region 3**

Stenner Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53505, Nitrogen, Nitrite **Region 3**

Stenner Creek

LOE ID:	52605

Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37463** **Region 3**

Stenner Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater

Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 29 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37463, Oxygen, Dissolved **Region 3**

Stenner Creek

LOE ID:	52642
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37463, Oxygen, Dissolved **Region 3**

Stenner Creek

LOE ID:	52641
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37463, Oxygen, Dissolved **Region 3**

Stenner Creek

LOE ID:	12646
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37463, Oxygen, Dissolved **Region 3**

Stenner Creek

LOE ID:	12665
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]

Temporal Representation:	Data was collected over the time period 8/19/2002-8/20/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37463, Oxygen, Dissolved **Region 3**

Stenner Creek

LOE ID:	12666
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Stenner Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 8/19/2002-8/20/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37463, Oxygen, Dissolved **Region 3**

Stenner Creek

LOE ID:	12645
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36793**	**Region 3**
Stenner Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 20 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36793, Sodium **Region 3**

Stenner Creek

LOE ID:	9570
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-7/29/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36793, Sodium **Region 3**

Stenner Creek

LOE ID:	52620
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36644** **Region 3**

Stenner Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36644, Specific Conductivity **Region 3**

Stenner Creek

LOE ID:	52587
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36644, Specific Conductivity **Region 3**

Stenner Creek

LOE ID:	10833
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36794** **Region 3**

Stenner Creek

Pollutant: **Temperature, water**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One of the 29 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36794, Temperature, water **Region 3**

Stenner Creek

LOE ID:	12664
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36794, Temperature, water **Region 3**

Stenner Creek

LOE ID:	12680
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 8/19/2002-8/20/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36794, Temperature, water **Region 3**

Stenner Creek

LOE ID:	52357
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53507** **Region 3**

Stenner Creek

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. The single sediment sample did not result in a significant toxic effect to one or more test organisms.

Two LOEs summarize water samples. The single water sample did result in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single water sample exceeded the water quality objective for aquatic life protection and resulted in a significant toxic effect to the test organisms. However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53507, Toxicity **Region 3**

Stenner Creek

LOE ID:	80366
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310SCNxxx.
Temporal Representation:	The sample was collected in September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53507, Toxicity **Region 3**

Stenner Creek

LOE ID:	80365
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity to Hyalella Azteca. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The sample was collected at station 310SCNxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53507, Toxicity **Region 3**

Stenner Creek

LOE ID:	58816
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Selenastrum capricornutum total cell count. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310SCNxxx.
Temporal Representation:	The sample was collected in September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53507, Toxicity **Region 3**

Stenner Creek

LOE ID:	58807
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity to Hyalella Azteca. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310SCNxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID **39486** **Region 3**

Stenner Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 27 samples exceed the evaluation guideline for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39486, Turbidity **Region 3**

Stenner Creek

LOE ID:	52644
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39486, Turbidity **Region 3**

Stenner Creek

LOE ID:	12663

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50067** **Region 3**

Stenner Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Six of 12 samples

exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50067, Escherichia coli (E. coli) **Region 3**

Stenner Creek

LOE ID:	52512
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	36856	Region 3
Stenner Creek		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. One of the 27 samples exceed the water quality objective for Cold Freshwater Habitat, 3 of the 27 samples exceed the water quality objective for Agricultural Supply, and 7 of the 27 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 27 samples exceed the water quality objectives for Drinking Water and Recreation and these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36856, pH	**Region 3**
Stenner Creek	

LOE ID:	52643
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36856, pH **Region 3**

Stenner Creek

LOE ID:	52606
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36856, pH **Region 3**

Stenner Creek

LOE ID:	52362
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36856, pH **Region 3**

Stenner Creek

LOE ID:	52513
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36856, pH **Region 3**

Stenner Creek

LOE ID:	52515
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Stenner Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/21/2009-12/16/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36856, pH **Region 3**

Stenner Creek

LOE ID:	11733
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36856, pH **Region 3**

Stenner Creek

LOE ID:	11737
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36856, pH **Region 3**

Stenner Creek

LOE ID:	11736
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36856, pH **Region 3**

Stenner Creek

LOE ID:	11735
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36856, pH **Region 3**

Stenner Creek

LOE ID:	11734
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Stenner Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Stenner Creek was collected at 1 monitoring site [310SCN-Stenner Creek at Nipomo street]
Temporal Representation:	Data was collected over the time period 1/15/2002-3/19/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Los Osos Creek (Los Osos to Morro Bay)**
Water Body ID: **CAR3102301219980826102833**
Water Body Type: **River & Stream**

DECISION ID **32496** **Region 3**
Los Osos Creek (Los Osos to Morro Bay)

Pollutant: **Fecal Coliform**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status Original
Reason for Delisting: Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Regional Board Staff Decision Recommendation: This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 32496, Fecal Coliform **Region 3**
Los Osos Creek (Los Osos to Morro Bay)

LOE ID: 17640

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference: Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and

	Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32496, Fecal Coliform **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	17641
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32496, Fecal Coliform — Region 3

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	1907
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID 41486 — Region 3

Los Osos Creek (Los Osos to Morro Bay)

Pollutant:	**Nitrate**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 41486, Nitrate — Region 3

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18307
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41486, Nitrate **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18308
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41486, Nitrate **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	1910
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID 33910 **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

Pollutant:	**Nutrients**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments. .
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 33910, Nutrients — Region 3

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	1909
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID 42064 — Region 3

Los Osos Creek (Los Osos to Morro Bay)

Pollutant:	**Oxygen, Dissolved**

Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42064, Oxygen, Dissolved **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18118
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42064, Oxygen, Dissolved **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	3960
Pollutant:	Low Dissolved Oxygen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42064, Oxygen, Dissolved **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18119
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 32971 Region 3

Los Osos Creek (Los Osos to Morro Bay)

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 32971, Sedimentation/Siltation Region 3

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	1906
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

DECISION ID 42066 Region 3
Los Osos Creek (Los Osos to Morro Bay)

Pollutant:	**Electrical Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42066, Electrical Conductivity Region 3
Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	17665
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42065 Region 3

Los Osos Creek (Los Osos to Morro Bay)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42065, Escherichia coli (E. coli) Region 3

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18539
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and

	results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42065, Escherichia coli (E. coli) **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18540
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42078 Region 3

Los Osos Creek (Los Osos to Morro Bay)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42078, Temperature, water Region 3

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18776
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42070 Region 3

Los Osos Creek (Los Osos to Morro Bay)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42070, Turbidity Region 3

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18722
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42070, Turbidity **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18723
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	42081	Region 3
Los Osos Creek (Los Osos to Morro Bay)		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.
Regional Board Staff Decision Recommendation:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Los Osos Creek Estuary and/or Los Osos Creek (Los Osos to Estuary) . The LOEs and the decision language in this decision will be associated with a new decision for one of these newly mapped segments.

Line of Evidence (LOE) for Decision ID 42081, pH	**Region 3**
Los Osos Creek (Los Osos to Morro Bay)	

LOE ID:	18874
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42081, pH **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18872
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42081, pH **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18856
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42081, pH **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18855
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42081, pH **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18854
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42081, pH **Region 3**

Los Osos Creek (Los Osos to Morro Bay)

LOE ID:	18873
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Los Osos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Los Osos Creek was collected at 1 monitoring site [310-SYB-41 - Santa Ysabel Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Warden Creek**
Water Body ID: **CAR3102301020021002232250**
Water Body Type: **River & Stream**

DECISION ID	32865	Region 3
Warden Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004. The original listing was based of the information contained in LOE ID# 21561. In summary, 110 of 292 fecal coliform samples exceeded the Water Contact Recreation Objective.These samples were collected monthly between March 1996 and April 1999 by volunteers and staff working under and EPA approved QAPP.

More recent data, collected by CCAMP staff during monthly monitoring between February 2002 - March 2003, and February 2009 - December 2009 have sufficient sample counts to determine with the power and confidence of the listing policy that water quality standards are not being met. Seven of 16 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 16 samples exceed the water quality objective for non-contact recreation.

The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. A TMDL was approved by USEPA for fecal coliform in Los Osos Creek (the receiving water for Warden Creek) on January 20, 2004.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 16 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision

After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32865, Fecal Coliform **Region 3**

Warden Creek

LOE ID:	52703
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 5 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32865, Fecal Coliform **Region 3**

Warden Creek

LOE ID:	52706
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32865, Fecal Coliform **Region 3**

Warden Creek

LOE ID:	21561
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	292
Number of Exceedances:	110
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay National Monitoring Program data for Warden Creek to determine beneficial use support and results are as follows: 110 of 292 samples exceed the criterion for Fecal Coliform.
Data Reference:	Support document for Morro Bay TMDL for pathogens (including Chorro and Los Osos Creeks). San Louis Obispo, CA: Central Coast RWQCB
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site (310TUR, Warden Creek at Turri Road).
Temporal Representation:	Data was collected monthly between 3/1/1996-4/28/1999. Warden Creek by volunteers and National Estuary Program staff.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the QAPP for the Morro Bay Watershed National Monitoring Program (Worcester et al., 1996).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32865, Fecal Coliform **Region 3**

Warden Creek

LOE ID:	11592
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32865, Fecal Coliform **Region 3**

Warden Creek

LOE ID:	11593
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36742** **Region 3**

Warden Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-one lines of evidence are available in the administrative record to assess this pollutant. The data associated with LOE 4020 (placeholder reference for assessments made prior to the 2006) is no longer available, the assessment has been made based on the most recent data. Fifty-two of the 116 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 23 of the 116 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats, therefore neither of these beneficial uses are supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-two of the 116 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 23 of the 116 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Both of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	48867
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 21 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality

	conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	47870
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 18 of 67 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	47871

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 5 of 67 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	47872
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 50 of 67 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	47873
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 50 of 67 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	48866
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	22
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 21 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	48865
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 12 of 22 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	48860
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 19 of 22 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	4020
Pollutant:	Low Dissolved Oxygen
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	13434
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-

	Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	13418
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	14548

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	14547
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and

	results are as follows: 11 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	14546
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 6 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	14545
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved — Region 3

Warden Creek

LOE ID:	13432
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved — Region 3

Warden Creek

LOE ID:	13433
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	52740
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	52741
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	52663
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36742, Oxygen, Dissolved **Region 3**

Warden Creek

LOE ID:	52664
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37458**	**Region 3**
Warden Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agriculture | Grazing-Related Sources
TMDL Name:	Los Osos Creek Nutrients
TMDL Project Code:	597
Date TMDL Approved by USEPA:	03/01/2005
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Seventeen lines of evidence are available in the administrative record to assess this pollutant. Twenty-seven of the 90 nitrate samples and 27 of the 41 nitrate/nitrite samples exceed the water quality objective for municipal and domestic supply use (i.e. drinking water). In addition, 75 of the 81 nitrate and 29 of the 30 nitrate/nitrite samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). This water segment is also on the 303(d) List for Low Dissolved Oxygen and this serves as supporting evidence of the occurrence of eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-seven of the 90 nitrate samples and 27 of the 41 nitrate/nitrite samples exceed the water quality objective for municipal and domestic supply use (i.e. drinking water). In addition, 75 of the 81 nitrate and 29 of the 30 nitrate/nitrite samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration and the protection of aquatic life uses from bio-stimulatory or eutrophic effects. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Los Osos Creek, Warden Creek, and Warden Lake Wetland TMDL for Nutrients was approved by USEPA in March of 2005.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list (being addressed by a USEPA approved TMDL) because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	48859
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 21 of 22 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	48918
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 12/17/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	48919
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 12/17/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	48856
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 12/17/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	48857
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 21 of 22 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	9975
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	47856
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	68
Number of Exceedances:	63
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 63 of 68 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	47857
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	68

Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 18 of 68 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	47869
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	68
Number of Exceedances:	63
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 63 of 68 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	15335
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 9 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	48858
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 14 of 22 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	52685
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	52662
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR

	- Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	52661
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37458, Nitrate — Region 3

Warden Creek

LOE ID:	52725
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37458, Nitrate — Region 3

Warden Creek

LOE ID:	52701
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37458, Nitrate **Region 3**

Warden Creek

LOE ID:	52739
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36743**	**Region 3**
Warden Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which zero of the 41 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 53 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 41 samples exceed the water quality objective for unionized ammonia and zero of the 53 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	9989
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	48904
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 5/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	48903
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	9988
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	14602
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	14601
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	15334
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	9974
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	48905
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 5/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	52683
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	52803
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia

	(NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36743, Ammonia **Region 3**

Warden Creek

LOE ID:	52723
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37988	Region 3
Warden Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Two of the 49 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 49 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37988, Chlorophyll-a	**Region 3**
Warden Creek	

LOE ID:	52724
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37988, Chlorophyll-a **Region 3**

Warden Creek

LOE ID:	52804
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37988, Chlorophyll-a **Region 3**

Warden Creek

LOE ID:	13417
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37988, Chlorophyll-a **Region 3**

Warden Creek

LOE ID:	48917
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37988, Chlorophyll-a **Region 3**

Warden Creek

LOE ID:	14529
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37988, Chlorophyll-a **Region 3**

Warden Creek

LOE ID:	13416
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37988, Chlorophyll-a **Region 3**

Warden Creek

LOE ID:	48916
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37988, Chlorophyll-a **Region 3**

Warden Creek

LOE ID:	14530
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41835**	**Region 3**
Warden Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses however, this decision will not use the single water sample because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single sediment samples (pore water) did not exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) however, this decision will not use the single pore water sample because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41835, Chlorpyrifos **Region 3**

Warden Creek

LOE ID:	16261
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1

samples exceed the criterion for Chlorpyrifos.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41835, Chlorpyrifos **Region 3**

Warden Creek

LOE ID:	47714
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water

	quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [Warden Creek @ Turi Road - 310TURxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41835, Chlorpyrifos **Region 3**

Warden Creek

LOE ID:	16260
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41835, Chlorpyrifos **Region 3**

Warden Creek

LOE ID:	47692
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [Warden Creek @ Turi Road - 310TURxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **41845** **Region 3**

Warden Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceeded the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41845, Diazinon **Region 3**

Warden Creek

LOE ID:	16634
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41845, Diazinon **Region 3**

Warden Creek

LOE ID:	16635
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41845, Diazinon **Region 3**

Warden Creek

LOE ID:	47689
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [Warden Creek @ Turi Road - 310TURxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41845, Diazinon **Region 3**

Warden Creek

LOE ID:	47734
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [Warden Creek @ Turi Road - 310TURxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48837** **Region 3**

Warden Creek

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Enterococcus is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48837, Enterococcus **Region 3**

Warden Creek

LOE ID:	47854
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Enterococci.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in marine waters is 104 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected on a single day 2/6/2008 8:17:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer

DECISION ID	37587	Region 3
Warden Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 119 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 119 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37587, Temperature, water	**Region 3**
Warden Creek	

LOE ID:	47904
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 67 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37587, Temperature, water **Region 3**

Warden Creek

LOE ID:	14600
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37587, Temperature, water **Region 3**

Warden Creek

LOE ID:	48881
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37587, Temperature, water **Region 3**

Warden Creek

LOE ID:	13452
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37587, Temperature, water **Region 3**

Warden Creek

LOE ID:	52682
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38375**	**Region 3**
Warden Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in sediment samples. One of the four sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Twelve LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and four water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in water samples. Zero of the eight water samples resulted in a significant toxic effect to one or more test organisms. When the sample count is summed, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the four sediment samples and zero of the eight water samples resulted in a significant toxic effect to one or more test organisms. However, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	58956
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate sediment toxicity. One of the two samples exhibited significant toxicity to Hyalella Azteca survival.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 310WRP Warden Creek.
Temporal Representation:	The samples were collected in April 2007 and 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	58946
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to evaluate water toxicity. None of the four samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth and Selenastrum capricornutum growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 310WRP Warden Creek.
Temporal Representation:	The samples were collected in 2008 and 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. No QAPP provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	80376
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate sediment toxicity. One of the two samples exhibited significant toxicity to Hyalella Azteca survival.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 310WRP Warden Creek.
Temporal Representation:	The samples were collected in April 2007 and 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	80374
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Four samples were collected to evaluate water toxicity. None of the four samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth and Selenastrum capricornutum growth.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 310WRP Warden Creek.
Temporal Representation:	The samples were collected in 2008 and 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. No QAPP provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	80375
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TURxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	58947
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The one sample did not exhibit

	significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TURxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24688
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24692
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24717
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24718
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24723
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24700
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24712
Pollutant:	Vertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24722
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24704
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24716
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas

	Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24693
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38375, Toxicity **Region 3**

Warden Creek

LOE ID:	24694
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37989 Region 3

Warden Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Eight of the 117 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 7 of the 117 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 117 samples exceed the evaluation guideline for Cold Freshwater Habitat and 7 of the 117 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37989, Turbidity Region 3

Warden Creek

LOE ID:	14584

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37989, Turbidity **Region 3**

Warden Creek

LOE ID:	14599
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37989, Turbidity **Region 3**

Warden Creek

LOE ID:	13436
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37989, Turbidity **Region 3**

Warden Creek

LOE ID:	47892
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	65
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 65 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37989, Turbidity **Region 3**

Warden Creek

LOE ID:	47891
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	65
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 65 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37989, Turbidity **Region 3**

Warden Creek

LOE ID:	13435
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37989, Turbidity **Region 3**

Warden Creek

LOE ID:	48880
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37989, Turbidity **Region 3**

Warden Creek

LOE ID:	48879
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37989, Turbidity **Region 3**

Warden Creek

LOE ID:	52681
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37989, Turbidity **Region 3**

Warden Creek

LOE ID:	52743
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass

Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37595 Region 3

Warden Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Eleven of the 114 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Zero of the 114 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 114 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Zero of the 114 samples exceed the water quality objectives for Drinking Water and Recreation. None of these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37595, pH Region 3

Warden Creek

LOE ID:	52705
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	52702
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]

Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	52722
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	52742
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	52665
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]

Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	11611
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	11612
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	48868
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 1 of 22 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	48869
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	48870
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	48877
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	48878
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 1 of 22 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	47890
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	65
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 10 of 65 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	47874
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	65
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 10 of 65 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	47887
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	65
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 65 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	47888
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	65
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 65 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	14549
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not

	be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	14583
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - NOT ON AG WAIVER SITES LIST?????????]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	14582
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	14581
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - NOT ON AG WAIVER SITES LIST?????????]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	14580
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310WRP - Warden Creek, above Los Osos Creek]
Temporal Representation:	Data was collected over the time period 2/24/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	11596
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	47889
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	65
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 0 of 65 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 5/31/2002 1:30:00 PM-3/1/2010 11:05:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	11594
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37595, pH **Region 3**

Warden Creek

LOE ID:	11595
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Warden Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR-

	Warden Creek at Turi Road]
Temporal Representation:	Data was collected over the time period 2/14/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48838 Region 3

Warden Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Thirty-three of 78 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-three of 78 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48838, Escherichia coli (E. coli) Region 3

Warden Creek

LOE ID:	47855
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	70
Number of Exceedances:	30
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Warden Creek to determine beneficial use support and results are as follows: 30 of 70 samples exceed the criterion for Escherichia coli.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 7/1/2002 10:30:00 AM-2/11/2010 11:15:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 48838, Escherichia coli (E. coli) **Region 3**

Warden Creek

LOE ID:	52704
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Warden Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Warden Creek was collected at 1 monitoring site [310TUR - Warden Creek at Turri Road]
Temporal Representation:	Data was collected over the time period 2/18/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Bernardo Creek**
Water Body ID: **CAR3102201220020124134314**
Water Body Type: **River & Stream**

DECISION ID **48909** **Region 3**
San Bernardo Creek

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for water contact recreation for Enterococcus is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. One of 1 samples exceed the evaluation guideline (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) for contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 1 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48909, Enterococcus **Region 3**
San Bernardo Creek

LOE ID: 47782

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Enterococci.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in marine waters is 104 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310SBE - San Bernardo Creek]
Temporal Representation:	Data was collected on a single day 8/15/2005 12:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID	39922	Region 3
San Bernardo Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 83 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use or the Municipal and Domestic Supply beneficial use. Eight of the 80 nitrate samples exceed the water quality objectives for Cold Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. The following is a summary of the supporting evidence: 1) Dissolved oxygen for this water body ranged from 7.3 mg/L to 13.8 mg/L, once exceeding the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) does not predict benthic chlorophyll a, algal biomass, or benthic algal contribution to oxygen deficit in ranges that are indicative of eutrophication (R3 NNE Technical Report, 2010).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 80 nitrate samples exceed the water quality objectives for Cold Freshwater Habitat. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy but there is insufficient evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39922, Nitrate **Region 3**

San Bernardo Creek

LOE ID:	47785
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	80
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 80 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP

QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39922, Nitrate **Region 3**

San Bernardo Creek

LOE ID:	18189
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39922, Nitrate **Region 3**

San Bernardo Creek

LOE ID:	47787
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	80
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 80 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39922, Nitrate **Region 3**

San Bernardo Creek

LOE ID:	47786
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	80
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 8 of 80 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39922, Nitrate **Region 3**

San Bernardo Creek

LOE ID:	18188
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	39923	Region 3
San Bernardo Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 80 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 80 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39923, Oxygen, Dissolved	**Region 3**
San Bernardo Creek	

LOE ID:	47790
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	72
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 4 of 72 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 12/19/2002 11:15:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39923, Oxygen, Dissolved **Region 3**

San Bernardo Creek

LOE ID:	47788
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	77
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 77 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 12/19/2002 11:15:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39923, Oxygen, Dissolved **Region 3**

San Bernardo Creek

LOE ID:	18237
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39579**	**Region 3**
San Bernardo Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 84 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 84 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39579, Specific Conductivity **Region 3**

San Bernardo Creek

LOE ID:	17426
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39579, Specific Conductivity **Region 3**

San Bernardo Creek

LOE ID:	47783
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	81
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 81 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID **39870** **Region 3**

San Bernardo Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 82 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 82 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39870, Temperature, water **Region 3**

San Bernardo Creek

LOE ID:	47797
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	79
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 79 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 12/19/2002 11:15:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39870, Temperature, water **Region 3**

San Bernardo Creek

LOE ID:	18820
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **39756** **Region 3**

San Bernardo Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 85 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 85 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39756, Turbidity **Region 3**

San Bernardo Creek

LOE ID:	47796
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	82
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 2 of 82 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39756, Turbidity **Region 3**

San Bernardo Creek

LOE ID:	18742

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	39805	Region 3
San Bernardo Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Three of the 83 samples exceed the water quality objectives for Cold Freshwater Habitat, and zero of the 83 samples exceed the water quality objectives for Agricultural Supply, Drinking Water, and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 83 samples exceed the water quality objectives for Cold Freshwater Habitat, and zero of the 83 samples exceed the water quality objectives for Agricultural Supply, Drinking Water, and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	47791
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	82
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 82 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	18943
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	19004
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	19005
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	19006
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	47792
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	82
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San

	Bernardo Creek to determine beneficial use support and results are as follows: 3 of 82 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	47793
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	82
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 82 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	47794
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	82
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 82 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	47795
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	82
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 82 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 6/17/2002 9:30:00 AM-3/11/2010 3:50:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39805, pH **Region 3**

San Bernardo Creek

LOE ID:	18944
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39580 **Region 3**

San Bernardo Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Three lines of evidence are available in the administrative record to assess this pollutant. Thirty of 57 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 2 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty of 57 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39580, Escherichia coli (E. coli) **Region 3**

San Bernardo Creek

LOE ID:	18502
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39580, Escherichia coli (E. coli) Region 3

San Bernardo Creek

LOE ID:	47784
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	28
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Bernardo Creek to determine beneficial use support and results are as follows: 28 of 55 samples exceed the criterion for Escherichia coli.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 2 monitoring sites [310SBE - San Bernardo Creek, 310USB - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 2/4/2003 3:15:00 PM-2/8/2010 10:41:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer

Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39580, Escherichia coli (E. coli) **Region 3**

San Bernardo Creek

LOE ID:	18501
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **39578** **Region 3**

San Bernardo Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for listing under section 2.2 and 3.2 of the Listing Policy. Under these sections of the Policy, a minimum of one line of evidence is needed to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The original

listing was based on data collected by the National Monitoring Program at Morro Bay. Very little new data is available for this water segment-pollutant combination. The single sample exceeds the Water Contact Recreation water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.

USEPA in its final decision for the 2006 303(d) list, has determined that a TMDL has not been approved by USEPA for this pollutant water body combination. Therefore, this water body pollutant combination is being placed back on the 303(d) list (TMDL required list) pending completion and USEPA approval of a TMDL. However, a TMDL was approved by USEPA for fecal coliform in Chorro Creek (the receiving water for San Bernardo Creek) on January 20, 2004.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39578, Fecal Coliform **Region 3**

San Bernardo Creek

LOE ID:	17382
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39578, Fecal Coliform — Region 3

San Bernardo Creek

LOE ID:	17662
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Bernardo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Bernardo Creek was collected at 1 monitoring site [310-SBE-41 - San Bernardo Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39578, Fecal Coliform — Region 3

San Bernardo Creek

LOE ID:	1904
Pollutant:	Fecal Coliform
LOE Subgroup:	Remedial Program in Place
Matrix:	Not Specified
Fraction:	
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Chorro Creek**
Water Body ID: **CAR3102201219980825120817**
Water Body Type: **River & Stream**

DECISION ID	33489	Region 3
Chorro Creek		

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This water segment / pollutant combination was removed from the CWA section 303(d) List in the 2010 assessment cycle.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Forty-three lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Fifty-two of 1,036 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and 2 of the 1,026 samples also exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats and the dissolved oxygen levels are supporting the Warm beneficial use. Therefore, the use support rating for this pollutant is set at fully supporting.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three water quality objectives are assessed. Fifty-two of 1,036 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 2 of the 1,026 samples also exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen but neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved	Region 3
Chorro Creek	

LOE ID:	49977
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 17 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	49976
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	49975
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved — Region 3

Chorro Creek

LOE ID:	49978
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved — Region 3

Chorro Creek

LOE ID:	50268
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	50267
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 17 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	50266
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	50265
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	26479
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat | Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Wildlife Habitat
Number of Samples:	250
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 30 of 250 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 3 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1

	Bridge and 310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	26477
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	250
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 250 samples exceed the criterion for Dissolved Oxygen.
Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 3 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1 Bridge and 310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	26478

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat | Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Wildlife Habitat
Number of Samples:	250
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 250 samples exceed the criterion for Dissolved Oxygen.
Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 3 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1 Bridge and 310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	47981
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	519
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 17 of 519 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	47983
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	519
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 519 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	47935
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	73
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: The daily minimum dissolved oxygen concentration was evaluated for 73 sample days and five monitoring sites on Chorro Creek and the criterion was exceeded 17 times.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 5 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period August 24, 2004 - April 4, 2010
Environmental Conditions:	Dissolved oxygen data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the minimum value for each sample day was compared to the water quality objective as defined in Section
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	47937
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	73
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: The daily minimum dissolved oxygen concentration was evaluated for 73 sample days and five monitoring sites on Chorro

	Creek and the criterion was never exceeded.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 5 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period August 24, 2004 - April 4, 2010
Environmental Conditions:	Dissolved oxygen data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the minimum value for each sample day was compared to the water quality objective as defined in Section
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	47938
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	73
Number of Exceedances:	57
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: The daily median oxygen saturation value was evaluated for 73 sample days and five monitoring sites on Chorro Creek and the criterion was exceeded 57 times.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 5 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period August 24, 2004 - April 4, 2010

Environmental Conditions:	Oxygen Saturation data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily median value for each sample day was compared to the water quality objective as defined in S
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	47950
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	73
Number of Exceedances:	57
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: The daily median oxygen saturation value was evaluated for 73 sample days and five monitoring sites on Chorro Creek and the criterion was exceeded 57 times.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 5 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period August 24, 2004 - April 4, 2010
Environmental Conditions:	Oxygen Saturation data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily median value for each sample day was compared to the water quality objective as defined in S
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	48015
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	517
Number of Exceedances:	112
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 112 of 517 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCR - Upper Chorro Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC)]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	48016
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	517
Number of Exceedances:	112
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 112 of 517 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCR - Upper Chorro Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC)]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	48092
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	48094
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	48095
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 9 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	48096
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 9 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	18192
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	18193
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	13453
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 58 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	14559
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	13456
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 9 of 58 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	14560
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	14561
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	14562
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	13454
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	13455
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 9 of 58 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	12602
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	12603
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	12638
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 2 monitoring sites [310CAN-Chorro Creek at Canet Road, 310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	12639
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 2 monitoring sites [310CAN-Chorro Creek at Canet Road, 310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	12604
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	12595
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 10 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 2 monitoring sites [310CAN-Chorro Creek at Canet Road, 310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	12596
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 10 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 2 monitoring sites [310CAN-Chorro Creek at Canet Road, 310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	12601
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and

	Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	1903
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Regional Board staff is proposing that Chorro Creek (downstream of Chorro Creek Road) be listed as impaired for dissolved oxygen. The impairment is evidenced by depressed levels of dissolved oxygen measured during pre-dawn and 24-hour sampling periods. Continuous depressed levels of dissolved oxygen (< 7.0 mg/l) were found in Chorro Creek at TWB (approximately between 12a.m-8a.m.) during three 24-hour hourly sampling periods in July, August and September 2003. Continuous depressed levels of oxygen were also found between 5 p.m. and 7 a.m. at site added in September 2003 upstream of TWB (usTWB) (CCRWQCB, 2004o). Dissolved oxygen levels were within the COLD water quality objective at CAN during three 24-hour hourly sampling periods in July, August and September 2003 (CCAMP, 2004). Dissolved oxygen levels just under the COLD water quality objective (6.81-6.99 mg/l) were found during one of three sampling periods at an upstream site (CHO) in August 2003. Regional Board staff does not consider the segment upstream of CAN (and CHO) as impaired. Regional Board staff considers the segment between usTWB and TWB (downstream of Chorro Creek Road) as impaired for dissolved oxygen. The level of impairment between CAN and usTWB is unknown. Five out of 10 samples exceeded the COLD dissolved oxygen water quality objective.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	COLD dissolved oxygen water quality objective of 7.0 mg/l.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Chorro Creek (Calwater watershed no. 31022012) downstream of Chorro Creek Road. Measurements were taken in Chorro Creek at four locations (CHO, CAN, usTWB, and TWB).
Temporal Representation:	Hourly measurements were taken in three 24-hour hourly sampling periods in July, August, and September 2003.
Environmental Conditions:	Hourly dissolved oxygen measurements were taken using a recording dissolved oxygen meter.
QAPP Information:	Dissolved oxygen measurements in Chorro Creek were taken according to CCAMP 24-hour hourly recording meter sampling protocols. Morro Bay Volunteer Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33489, Oxygen, Dissolved **Region 3**

Chorro Creek

LOE ID:	26476
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	250
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 30 of 250 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 3 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1 Bridge and 310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

DECISION ID 39043 **Region 3**

Chorro Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Grazing-Related Sources | Natural Sources | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. A total of 117 of the 539 sample exceed the USEPA Ambient Water Quality Criteria for E. coli (1986). The total maximum daily loads (TMDLs) for pathogens and sediments in Morro Bay, Los Osos Creek, and Chorro Creek, California has been approved by USEPA on January 20, 2004 but there is no target set specifically for E. coli. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 117 of the 539 sample exceed the USEPA Ambient Water Quality Criteria for E. coli and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39043, Escherichia coli (E. coli) — Region 3

Chorro Creek

LOE ID:	47952
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	345
Number of Exceedances:	74
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 74 of 345 samples exceed the criterion for Escherichia coli.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310CAN - Chorro Creek at Canet Road, 310CER - Chorro Ecological Reserve, 310CHO - Chorro Camp SLO, 310TWB -Chorro Creek at South Bay Boulevard, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 8/6/2002 2:20:00 PM-2/22/2010 10:30:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 39043, Escherichia coli (E. coli) **Region 3**

Chorro Creek

LOE ID:	18516
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39043, Escherichia coli (E. coli) **Region 3**

Chorro Creek

LOE ID:	26517
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	116
Number of Exceedances:	32
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 32 of 116 samples exceed the Evaluation Guideline for E. coli.
Data Reference:	Final_Data_MBVMP_Bacteria_for_Chorro_Creek
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Staff and volunteer working with the Morro Bay Volunteer Monitoring PRogram collected data from four monitoring sites (310TWB - Chorro Creek at South Bay Blvd, 310CAN - Chorro Creek at Cannet Road, 310CER - Chorro Creek Ecological Reserve, in between Gilardi road and Canet Road and 310CHO - Chorro Creek at Highway 1).
Temporal Representation:	Data was collected (approxinately monthly) between August 2002 and December 2006.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39043, Escherichia coli (E. coli) **Region 3**

Chorro Creek

LOE ID:	11671
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39043, Escherichia coli (E. coli) **Region 3**

Chorro Creek

LOE ID:	11672
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39043, Escherichia coli (E. coli) **Region 3**

Chorro Creek

LOE ID:	18517
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39043, Escherichia coli (E. coli) **Region 3**

Chorro Creek

LOE ID:	50170
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39

Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39043, Escherichia coli (E. coli) **Region 3**

Chorro Creek

LOE ID:	50171
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38376** **Region 3**

Chorro Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Grazing-Related Sources | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Morro Bay Pathogens
TMDL Project Code:	22
Date TMDL Approved by USEPA:	01/20/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. A total of 212 out of 992 sample exceed the water quality objective for water contact recreational uses (e.g. swimming). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 212 out of 992 sample exceed the water quality objective and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The total maximum daily loads (TMDL) for pathogens and sediment in Morro Bay, Chorro and Los Osos Creeks has been approved by the USEPA on January 20, 2004. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. The water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	50169

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	50188
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	50189
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]

Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	50168
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	1902

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	869
Number of Exceedances:	193
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	One hundred ninety-three of 869 samples exceed the water quality objectives.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Six stations were sampled.
Temporal Representation:	There were weekly or bi-weekly sampling events from 6/93 to 5/99.
Environmental Conditions:	
QAPP Information:	Morro Bay National Monitoring Program (MBNMP) QA/QC.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	1901
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	10808
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 4 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	10824
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	11613
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 7 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and

	Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	11614
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	17563
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38376, Fecal Coliform **Region 3**

Chorro Creek

LOE ID:	17562
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38667** **Region 3**

Chorro Creek

Pollutant:	**Nutrients**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Flow Alteration/Regulation/Modification | Minor Municipal Point Source-dry and/or wet weather discharge | Natural Sources | Nonpoint Source
TMDL Name:	Chorro Creek Nutrients and Dissolved Oxygen
TMDL Project Code:	618
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Thirty-six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 748 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial uses. One of the 748 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Four hundred thirty-seven of the 636 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Two of the 96 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Seventy-six of the 84 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Twenty-one of the 24 nitrate nitrogen samples exceed the water quality objectives for Cold Freshwater Habitat. Thirty-five of the 59 samples for Orthophosphate exceed the water quality objectives for Cold Freshwater Habitat.

The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat.

The following is a summary of the supporting evidence:

1) Dissolved oxygen for this water body ranged from 0.0 mg/L to 14.5 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and sometimes exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). This waterbody is listed for low dissolved oxygen and a TMLD has been has been completed and approved by USEPA on 07/19/2007.
2) Water column chlorophyll a concentration ranged up to 63 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 1.56 mg/L to 1.87 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

It should be noted that all exceedances of the Water Quality Standards occur at stations located below the effluent discharge point from the California Men's Colony. All data collected upstream at the 310CHO station indicate that for nutrients and dissolved oxygen, Water Quality Standards are attained.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four hundred thirty-seven of the 636 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Seventy-six of the 84 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Twenty-one of the 24 nitrate nitrogen samples exceed the water quality objectives for Cold Freshwater Habitat. Thirty-five of the 59 samples for Orthophosphate exceed the water quality objectives for Cold Freshwater Habitat. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. There is sufficient supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat.
4. The Chorro Creek Nutrients and DO TMDL has been approved by USEPA on 07/19/2007.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant, developed in the Chorro Creek Nutrient TMDL (July, 2007), are being exceeded.

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	25331
Pollutant:	Orthophosphate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	59

Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	CCAMP monitoring data collected data monthly between April 2001 and December 2006 (with the exception of April 2004 Â– December 2004) from a single site (Chorro Creek at South Bay Boulevard, 310TWB) was used to determine if the TMDL is being met.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause a nuisance or adversely affect beneficial uses (Water Quality Control Plan, Central Coast Basin, Chapter 3, Section II.A.2.a, General Objectives).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The following TMDL is established in the Total Maximum Daily Load for Nutrients and Dissolved Oxygen in Chorro Creek, San Luis Obispo County, California (Approved July 19, 2007 by USEPA) to achieve the narrative water quality objective for biostimulatory substances. Median orthophosphorus-P concentration shall not exceed 0.4 mg/L-P within the half-mile reach of Chorro Creek, measured upstream from the road crossing at South Bay Boulevard.
Guideline Reference:	Region 3 TMDL reports, plans and data for multiple waterbodies. San Luis Obispo, CA: Central Coast RWQCB. http://www.waterboards.ca.gov/central coast/TMDL/303dand TMDLprojects.htm
Spatial Representation:	Regional Board staff analyzed monitoring data from one site (Chorro Creek at South Bay Boulevard, 310TWB) in this assessment.
Temporal Representation:	CCAMP staff collected monitoring data monthly between April 2001 and December 2006 (with the exception of April 2004 Â– December 2004).
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (Puckett et al, 2002)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	48149
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	47969
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	572
Number of Exceedances:	383
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 383 of 572 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region

	IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	47968
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	572
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 572 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	47967
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	572
Number of Exceedances:	383
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 383 of 572 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	47966
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	572

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 572 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	48162
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	48161
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 31 of 33 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	48159
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	48091

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 31 of 33 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	9936
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	9992
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	10005
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	18412
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	18413
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	9949
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	15248
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	25329
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	24
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	CCAMP monitoring data collected data monthly between April 2001 and December 2006 (with the exception of April 2004 Â– December 2004) from a single site (Chorro Creek at South Bay Boulevard, 310TWB) was used to determine if the TMDL is being met. Only data collected between the months of May and September were used in this assessment. Twenty-one of the 24 samples, as well as the median value, exceed the TMDL.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause a nuisance or adversely affect beneficial uses (Water Quality Control Plan, Central Coast Basin, Chapter 3, Section II.A.2.a, General Objectives).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The following TMDL is established in the Total Maximum Daily Load for Nutrients and Dissolved Oxygen in Chorro Creek,San Luis Obispo County, California (Approved July 19, 2007 by USEPA) to achieve the narrative water quality objective for biostimulatory substances. Median nitrate-N concentration shall not exceed 1.5 mg/L-N within the half-mile reach of Chorro Creek, measured upstream from the road crossing at South Bay Boulevard. The median is measured as a rolling median from May through September.
Guideline Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Spatial Representation:	Regional Board staff analyzed monitoring data from one site (Chorro Creek at South Bay Boulevard, 310TWB) in this assessment.
Temporal Representation:	CCAMP staff collected monitoring data monthly between April 2001 and December 2006 (with the exception of April 2004 Â– December 2004).
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (Puckett et al., 2002)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	48150
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	48148
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50250
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 37 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

	for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50249
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50248
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 37 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50152

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50151
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50149
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50204
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50203
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to

	determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50150
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]

Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50264
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 8 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients — Region 3

Chorro Creek

LOE ID:	50260
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 37 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients — Region 3

Chorro Creek

LOE ID:	50261
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50262
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 37 of 38 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	50263
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 8 of 13 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	53990
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of the samples exceeded the objective for Nitrate in the Basin Plan. The Continuious probe (a MBARI In Situ Ultraviolet Spectrophotometer) took nitrate measurments every 15 minutes and seven day averages were calculated. There were 34 seven day averages calculated and those values were compared to the criteria.
Data Reference:	Data for temperature and nutrients in Morro Bay and Chorro Creek
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Region 3 Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken in Chorro Creek near the mouth of the River at Morro Bay. WBID CAR3102201219980825120817
Temporal Representation:	Samples were collected continuously every 15 minutes from 1/2008 through 3/23/2009.

	There were some occasional breaks in monitoring data throughout this time frame.
Environmental Conditions:	
QAPP Information:	All samples were collected using the methods outlined in the San Luis Obispo Science and Ecosystem Alliance Water Quality Observatory Quality Assurance Project Plan (2008),San Luis Obispo Science and Ecosystem Alliance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38667, Nutrients **Region 3**

Chorro Creek

LOE ID:	53989
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of the samples collected by the San Luis Science and Ecosystem Alliance exceeded the objective for Nitrate in the Basin Plan. The Continuious probe (a MBARI In Situ Ultraviolet Spectrophotometer) took nitrate measurments every 15 minutes and seven day averages were calculated. There were 34 seven day averages calculated and those values were compared to the criteria.
Data Reference:	Data for temperature and nutrients in Morro Bay and Chorro Creek
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 45.0 mg/L as NO3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were taken in Chorro Creek near the mouth of the River at Morro Bay. WBID CAR3102201219980825120817
Temporal Representation:	Samples were collected continuously every 15 minutes from 1/2008 through 3/23/2009. There were some occasional breaks in monitoring data throughout this time frame.
Environmental Conditions:	
QAPP Information:	All samples were collected using the methods outlined in the San Luis Obispo Science and Ecosystem Alliance Water Quality Observatory Quality Assurance Project Plan (2008),San Luis Obispo Science and Ecosystem Alliance.
QAPP Information Reference(s):	

DECISION ID **38877** **Region 3**

Chorro Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Twelve LOEs summarize unionized ammonia data in which 2 of the 154 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Six LOEs summarize total ammonia data and zero of the 175 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 154 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Six LOEs summarize total ammonia data and zero of the 175 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	50231
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section

	II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	50232
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	50148
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	50134
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	50243
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	50244
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	48121
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	48133
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 22 samples exceed the

	criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 4/12/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	15247
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	14542
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	14541
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	48134
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 22 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 4/12/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	9990
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	9590
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	9591
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	9932
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 16

	samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	9933
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38877, Ammonia **Region 3**

Chorro Creek

LOE ID:	9934
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38542** **Region 3**

Chorro Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 110 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 110 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38542, Boron **Region 3**

Chorro Creek

LOE ID:	9991
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 52 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the

	maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38542, Boron **Region 3**

Chorro Creek

LOE ID:	9935
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38542, Boron **Region 3**

Chorro Creek

LOE ID:	50182
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38542, Boron **Region 3**

Chorro Creek

LOE ID:	50183
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	12

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	38415	Region 3
Chorro Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 165 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 165 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	14543
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	14544
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a — Region 3

Chorro Creek

LOE ID:	13490
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a — Region 3

Chorro Creek

LOE ID:	48135

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	10006
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	12600
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	12585
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	13491
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	10007
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	48136
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	50245
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	50246
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	50247
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38415, Chlorophyll-a **Region 3**

Chorro Creek

LOE ID:	50233
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41945**	**Region 3**
Chorro Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of zero water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). This decision will not

use the single water sample takens because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). Pore water samples will not be the sole basis for any decision and are not included in the exceedance count. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41945, Chlorpyrifos **Region 3**

Chorro Creek

LOE ID:	47713
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [Chorro Creek at Canet Road - 310CANxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41945, Chlorpyrifos **Region 3**

Chorro Creek

LOE ID:	47712
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [Chorro Creek at South Bay Boulevard - 310TWBxxx]

Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41945, Chlorpyrifos **Region 3**

Chorro Creek

LOE ID:	47691
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [Chorro Creek at Canet Road - 310CANxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41945, Chlorpyrifos **Region 3**

Chorro Creek

LOE ID:	16263
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41945, Chlorpyrifos **Region 3**

Chorro Creek

LOE ID:	16262
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41945, Chlorpyrifos **Region 3**

Chorro Creek

LOE ID:	16235
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41945, Chlorpyrifos **Region 3**

Chorro Creek

LOE ID:	16234
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41945, Chlorpyrifos **Region 3**

Chorro Creek

LOE ID:	47727
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [Chorro Creek at South Bay Boulevard - 310TWBxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **41946** **Region 3**

Chorro Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of 3 pore water samples exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41946, Diazinon **Region 3**

Chorro Creek

LOE ID:	16636
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41946, Diazinon **Region 3**

Chorro Creek

LOE ID:	16637
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41946, Diazinon **Region 3**

Chorro Creek

LOE ID:	16655
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41946, Diazinon **Region 3**

Chorro Creek

LOE ID:	47688
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [Chorro Creek at Canet Road - 310CANxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41946, Diazinon **Region 3**

Chorro Creek

LOE ID:	47655
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [Chorro Creek at South Bay Boulevard - 310TWBxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41946, Diazinon **Region 3**

Chorro Creek

LOE ID:	16656
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41946, Diazinon **Region 3**

Chorro Creek

LOE ID:	47670
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [Chorro Creek at South Bay Boulevard - 310TWBxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41946, Diazinon **Region 3**

Chorro Creek

LOE ID:	47733
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [Chorro Creek at Canet Road - 310CANxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **53543** **Region 3**

Chorro Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 52 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 52 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53543, Nitrogen, Nitrite **Region 3**

Chorro Creek

LOE ID:	50225
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 53543, Nitrogen, Nitrite **Region 3**

Chorro Creek

LOE ID:	50226
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38763** **Region 3**

Chorro Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Nine lines of evidence are available in the administrative record to assess this pollutant. One of the 758 samples exceed the water quality objective for agriculture uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 758 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38763, Specific Conductivity **Region 3**

Chorro Creek

LOE ID:	47934
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	71
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: The daily average conductivity concentration was calculated for 71 sample days at Chorro Creek sites and never exceeded the criterion.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 5 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period July 5, 2005 - April 4, 2010.
Environmental Conditions:	Conductivity data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily average conductivity was compared to the water quality objective as defined in Section 6.1.5.6 of
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38763, Specific Conductivity **Region 3**

Chorro Creek

LOE ID:	48146
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38763, Specific Conductivity **Region 3**

Chorro Creek

LOE ID:	11651
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38763, Specific Conductivity **Region 3**

Chorro Creek

LOE ID:	11615
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38763, Specific Conductivity **Region 3**

Chorro Creek

LOE ID:	10825
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38763, Specific Conductivity **Region 3**

Chorro Creek

LOE ID:	17590
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38763, Specific Conductivity — Region 3

Chorro Creek

LOE ID:	47953
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	518
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 518 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38763, Specific Conductivity — Region 3

Chorro Creek

LOE ID:	50184
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38763, Specific Conductivity **Region 3**

Chorro Creek

LOE ID:	50185
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when

	conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38552 Region 3

Chorro Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Nine of the 782 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 782 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38552, Temperature, water Region 3

Chorro Creek

LOE ID:	50132
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	50133
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	77567
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Continuous data collected over two years showed MWMT temperature values over 20 degrees Celsius.
Data Reference:	Data for temperature and nutrients in Morro Bay and Chorro Creek
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	20 degrees Celsius.
Guideline Reference:	
Spatial Representation:	One station in Chorro Creek (Lat. 35.342250 Lon. -120.828183).
Temporal Representation:	Data collected every 15 minutes from 1/1/2008 through 3/22/2009.
Environmental Conditions:	
QAPP Information:	QA information contained in data submittal file and with the filename 'QA_LOE_water_sediment_tissue.pdf'.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	13475
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	48124
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to

	determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	18594
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	12597
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 2 monitoring sites [310CAN-Chorro Creek at Canet Road, 310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	14611

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	48014
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	520
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 520 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	12623
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38552, Temperature, water **Region 3**

Chorro Creek

LOE ID:	47951
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	73
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: The daily maximum water temperature was evaluated for 73 sample days at five monitoring sites on Chorro Creek and and water temperature exceeded the criterion on one sample day at one site.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 5 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period August 24, 2004 - April 4, 2010
Environmental Conditions:	Water temperature data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily maximum temperature was compared to the water quality objective as defined in Section 6.1.5.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 38479 **Region 3**

Chorro Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Twenty-three of the 691 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984) and 14 of the 691samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-three of the 691 samples exceed the cold freshwater habitat evaluation guideline and 14 of the 691samples exceed the warm freshwater habitat evaluation guideline and neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38479, Turbidity — Region 3

Chorro Creek

LOE ID:	12622
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	13493
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/30/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	14598
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	18703
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	18704
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	48122
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 33 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	48123
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 33 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	48013
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	524
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro

	Creek to determine beneficial use support and results are as follows: 5 of 524 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	48000
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	524
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 12 of 524 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats

	(same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	13474
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	14597
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	13473
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 51 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	13509
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/30/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	12621
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	50131
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	49983
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	49982
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38479, Turbidity **Region 3**

Chorro Creek

LOE ID:	50130
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38386** **Region 3**

Chorro Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Sixty lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Thirty of the 948 samples exceed the water quality objective for Agricultural supply, 39 of the 948 samples exceeded the water quality objectives for Drinking Water and Recreation and 66 of the 948 samples exceed the water quality objective for Cold Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Thirty of the 948 samples exceed the water quality objective for Agricultural supply, 39 of the 948 samples exceeded the water quality objectives for Drinking Water and Recreation and 66 of the 948 samples exceed the water quality objective for Cold Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11632
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]

Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11668
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11669
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	14576
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	14577
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	14595
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	14575
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11633
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	58
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 8 of 58 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11650
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]

Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11652
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11653

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	18882
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	18883
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	18884
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	18885
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	18886
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	48106
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	48107
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	48108
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC -

	Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	48109
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	48110
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	48111
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC -

	Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	47984
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	522
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 13 of 522 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	47985

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	522
Number of Exceedances:	58
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 58 of 522 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	47996
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	522
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 13 of 522 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	47997
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	522
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 13 of 522 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	47998

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	522
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 13 of 522 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	47999
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	522
Number of Exceedances:	58
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 58 of 522 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	26481
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	248
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 248 samples exceed the criterion for pH.
Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 4 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1 Bridge, 310CAN-Chorro Creek at Canet Road and 310CER - Chorro Creek at
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	26486
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	248
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 248 samples exceed the criterion for pH.
Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 4 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1 Bridge, 310CAN-Chorro Creek at Canet Road and 310CER - Chorro Creek at
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	14578
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	14579
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPSouth) data for Chorro Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/14/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	18866
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310-UCF-41 - Upper Chorro Flats]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	26487

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	248
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 248 samples exceed the criterion for pH.
Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 4 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1 Bridge, 310CAN-Chorro Creek at Canet Road and 310CER - Chorro Creek at
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	26482
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	248
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 248 samples exceed the criterion for pH.

Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 4 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1 Bridge, 310CAN-Chorro Creek at Canet Road and 310CER - Chorro Creek at
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	26484
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	248
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 248 samples exceed the criterion for pH.
Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For Cold Freshwater Habitat the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 4 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1 Bridge, 310CAN-Chorro Creek at Canet Road and 310CER - Chorro Creek at
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program

	volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	26485
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	248
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Morro Bay Volunteer Monitoring Program data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 248 samples exceed the criterion for pH.
Data Reference:	MBVMP Dissolved Oxygen, pH and Temperature data for Chorro Creek.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 4 monitoring sites [310TWB-Chorro Creek at South Bay Blvd., 310CHO - Chorro Creek at the Highway 1 Bridge, 310CAN-Chorro Creek at Canet Road and 310CER - Chorro Creek at
Temporal Representation:	Data was collected over the time period June 2002-December 2006. Chorro Creek monitoring sites are monitored monthly by Morro Bay Volunteer Monitoring Program volunteers. This monitoring is ongoing.
Environmental Conditions:	
QAPP Information:	USEPA approved QAPP (Morro Bay National Estuary Program's Volunteer Monitoring Program Quality Assurance Program Plan, version 4.3. October 2008. The author is the Morro Bay National Estuary Program).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	10846
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	10826
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	10827
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	10828
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	10844
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	10845
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Chorro Creek to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5

	nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN-Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11634
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 8 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH — Region 3

Chorro Creek

LOE ID:	11635
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	58
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 8 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH — Region 3

Chorro Creek

LOE ID:	11654
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11670
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/5/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	11631
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	58
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 4/24/2001-12/20/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	50187
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	50228
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	50186
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	50153
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	49979
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the

	criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	50190
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	50269
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	50167
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 13 samples exceed the

	criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	50191
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	50227
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	49980
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38386, pH **Region 3**

Chorro Creek

LOE ID:	49981
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47172	Region 3
Chorro Creek		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this indicator and 12 supporting lines of evidence are available to show impacts to aquatic life uses. Two LOEs summarize benthic invertebrate data scored using the Southern California IBI and one additional LOE summarizes some of those benthic invertebrate samples scored using CSCI. Four of the five samples scored below 40 on the SoCal IBI and two of the three samples scored below 0.79 on the CSCI impairment threshold. This water body segment if also on the CWA Section 303(d) List for nutrients, sedimentation and toxicity in both sediment and water.

Based on the readily available data and information, the weight of evidence provides sufficient justification for placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies does not satisfy the data quantity requirements of section 3.9 of the Policy.
3. Pursuant to section 3.9 of the Listing Policy, the water exhibits significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index and there are is supporting evidence showing pollutant concentrations impacting aquatic life uses in this water body segment. Therefore this water body segment meets the requirement of Section 3.9 of the listing policy for placement on the 303(d) List.
4. Pursuant to section 3.9 of the Listing Policy, the water segment has associated pollutant(s) samples that exceed water quality objectives (chloride, nutrients, DO, sediment toxicity, and unknown toxicity).
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are being met.

The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs).

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and pollutants contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects — Region 3

Chorro Creek

LOE ID:	48149
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects — Region 3

Chorro Creek

LOE ID:	1900
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	47967
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	572
Number of Exceedances:	383
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 383 of 572 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 6 monitoring sites [310TWB -Chorro Creek at South Bay Boulevard, 310CAN - Chorro Creek at Canet Road, 310CHO - Chorro Camp SLO, 310CER - Chorro Ecological Reserve, 310UCF -Upper Chorro Flats (same site as 310CCC), 310UCR - Upper Chorro Reserve]
Temporal Representation:	Data was collected over the time period 5/21/2002 3:10:00 PM-3/5/2010 9:10:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	78665
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to growth of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310CANxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects — Region 3

Chorro Creek

LOE ID:	78674
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Neither of the samples exhibited significant toxicity to any of the test organisms. The toxicity test included total cell count of Selenastrum capricornutum, survival and reproduction of Ceriodaphnia dubia and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310CAN - Choor Creek at Canet Road.
Temporal Representation:	The sample was collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects — Region 3

Chorro Creek

LOE ID:	79404
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for this site are 0.778028262, 0.680251616, and 0.906420493. Two of 3 samples are below the 0.79 threshold and therefore exceeding the water quality objective for the aquatic life beneficial use for this site.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 310TWBxxx
Temporal Representation:	Surveys done on May 12 2005, Apr 21 2009, and Jun 21 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	78666
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 310CCC-Chorro Creek.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	78675
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TWB - Chorro Creek at South Bay Blvd.
Temporal Representation:	The sample was collected in March 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	78676
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Seven samples were collected to evaluate water toxicity. Two of the seven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia (1/19/10 and 9/25/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 310CCC-Chorro Creek.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	78664
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One

	sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TWB - Chorro Creek at South Bay Blvd.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	50261
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	50260
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 37 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	53984
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores in this water body were 39 or lower and therefore are below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310CERxxx-Chorro Creek above Ecological Reserve, ~0.3mi above San Luisito Creek
Temporal Representation:	Surveys done on April 24, 2009 and June 3, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	54015
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TWB - Chorro Creek at South Bay Blvd.
Temporal Representation:	The sample was collected in March 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	54014
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TWB - Chorro Creek at South Bay Blvd.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	54013
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to growth of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental

Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation: The sample was collected at station 310CANxxx.
Temporal Representation: The sample was collected in May 2009.
Environmental Conditions:
QAPP Information: The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID: 54012

Pollutant: Toxicity
LOE Subgroup: Toxicity
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING
Data Used to Assess Water Quality: Two samples were collected to evaluate water toxicity. Neither of the samples exhibited significant toxicity to any of the test organisms. The toxicity test included total cell count of Selenastrum capricornutum, survival and reproduction of Ceriodaphnia dubia and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference: Santa Lucia Watershed Rotation 2009

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference: Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation: The samples were collected at station 310CAN - Choor Creek at Canet Road.
Temporal Representation: The sample was collected in March and September 2009.
Environmental Conditions:
QAPP Information: The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID: 54011

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Seven samples were collected to evaluate water toxicity. Two of the seven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia (1/19/10 and 9/25/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 310CCC-Chorro Creek.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	54016
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 310CCC-Chorro Creek.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47172, Benthic Community Effects **Region 3**

Chorro Creek

LOE ID:	53983
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Two of the 3 IBI scores in this water body were 39 or lower and therefore are below the impairment threshold of the Southern California IBI.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310TWBxxx-Chorro Creek at South Bay Boulevard
Temporal Representation:	Surveys done on May 12, 2005; April, 21 2009; June 21, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 47173 Region 3

Chorro Creek

Pollutant:	**Chloride**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Forty-eight of the 50 samples exceed the site specific water quality objective. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and the results are as follows: One year of data is summarized in LOE 58208 and the annual mean did exceed the site specific water quality objective. Three and a half years of data are summarized in LOE 50207 and all four annual means also exceeds the site specific water quality objective. In summary, 5 of the 5 annual means calculated for these data exceed the site specific water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 5 annual means calculated for the samples exceeded the site specific water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47173, Chloride — Region 3

Chorro Creek

LOE ID:	50207
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 37 of 38 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47173, Chloride **Region 3**

Chorro Creek

LOE ID:	50208
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	41982	Region 3
Chorro Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty-six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Ten LOEs summarizes sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and five additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess toxic effects in sediment samples. Two of the seven sediment samples resulted in a significant toxic effect to one or more test organisms. Sixteen LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and ten additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fourteen total samples are available to assess toxic effects in water samples. Two of the fourteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 14 water samples and two of seven sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41982, Toxicity	**Region 3**
Chorro Creek	

LOE ID:	78675
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TWB - Chorro Creek at South Bay Blvd.
Temporal Representation:	The sample was collected in March 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	78674
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Neither of the samples exhibited significant toxicity to any of the test organisms. The toxicity test included total cell count of Selenastrum capricornutum, survival and reproduction of Ceriodaphnia dubia and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but

	will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310CAN - Choor Creek at Canet Road.
Temporal Representation:	The sample was collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	78666
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	

Spatial Representation:	The samples were collected at 310CCC-Chorro Creek.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	78665
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to growth of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310CANxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	78664
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TWB - Chorro Creek at South Bay Blvd.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	78676
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Seven samples were collected to evaluate water toxicity. Two of the seven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia (1/19/10 and 9/25/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 310CCC-Chorro Creek.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	54011
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Seven samples were collected to evaluate water toxicity. Two of the seven samples exhibited significant toxicity. Samples exhibited significant toxicity to reproduction of Ceriodaphnia dubia (1/19/10 and 9/25/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 310CCC-Chorro Creek.
Temporal Representation:	The samples were collected from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41982, Toxicity — Region 3

Chorro Creek

LOE ID:	54014
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TWB - Chorro Creek at South Bay Blvd.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity — Region 3

Chorro Creek

LOE ID:	54012
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Neither of the samples exhibited significant toxicity to any of the test organisms. The toxicity test included total cell count of Selenastrum capricornutum, survival and reproduction of Ceriodaphnia dubia and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310CAN - Choor Creek at Canet Road.
Temporal Representation:	The sample was collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	54016
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity to Hyalella Azteca survival. The toxicity tests included survival and growth of Hyalella Azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 310CCC-Chorro Creek.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	54015
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not exhibit significant toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310TWB - Chorro Creek at South Bay Blvd.
Temporal Representation:	The sample was collected in March 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity — Region 3

Chorro Creek

LOE ID:	54013
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to growth of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. . For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 310CANxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity — Region 3

Chorro Creek

LOE ID:	23821
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23809
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23808
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23804
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23691
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23822
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23831
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23833
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23832

Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23805
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23807
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver

	Monitoring (R3_CMPsouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected over the time period 2/24/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23826
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23827
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPsouth) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek up stream from Chorro Flats]
Temporal Representation:	Data was collected on a single day 5/17/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41982, Toxicity **Region 3**

Chorro Creek

LOE ID:	23690
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 3/27/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47174**	**Region 3**
Chorro Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Municipal Point Sources
TMDL Name:	Chorro Creek Nutrients and Dissolved Oxygen
TMDL Project Code:	618
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Forty-four of the 50 samples exceed the site specific water quality objective. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and the results are as follows: One year of data is summarized in LOE 50212 and the annual mean did exceed the site specific water quality objective. Three and a half years of data are summarized in LOE 50211 and all four annual means also exceeds the site specific water quality objective. In summary, 5 of the 5 annual means calculated for these data exceed the site specific water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 5 annual means calculated for the samples exceeded the site specific water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Chorro Creek Nutrients TMDL has been approved by USEPA.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47174, Sodium **Region 3**

Chorro Creek

LOE ID:	50211
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 33 of 38 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47174, Sodium **Region 3**

Chorro Creek

LOE ID:	50212
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47175**	**Region 3**
Chorro Creek		

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Municipal Point Sources
TMDL Name:	Chorro Creek Nutrients and Dissolved Oxygen
TMDL Project Code:	618
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Forty-four of the 50 samples exceed the site specific water quality objective. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and the results are as follows: One year of data is summarized in LOE 50210 and the annual mean did exceed the site specific water quality objective. Three and a half years of data from different stations are summarized in LOEs 48147 and 50209 and all eight annual means also exceed the site specific water quality objective. In summary, 9 of the 9 annual means calculated for these data exceed the site specific water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d)

List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the 9 annual means calculated for the samples exceeded the site specific water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4.The Chorro Creek Nutrient TMDL has been approved by USEPA.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47175, Total Dissolved Solids **Region 3**

Chorro Creek

LOE ID:	50210
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 500 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CAN - Chorro Creek at Canet Road]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47175, Total Dissolved Solids **Region 3**

Chorro Creek

LOE ID:	50209
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 36 of 38 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 500 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB - Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected over the time period 1/18/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47175, Total Dissolved Solids **Region 3**

Chorro Creek

LOE ID:	48147
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Chorro Creek to determine beneficial use support and results are as follows: 29 of 33 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. TDS shall not exceed 500 mg/L
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310CCC - Chorro Creek]
Temporal Representation:	Data was collected over the time period 1/31/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**41988**	**Region 3**
Chorro Creek		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41988, Anthracene **Region 3**

Chorro Creek

LOE ID:	15831
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41988, Anthracene **Region 3**

Chorro Creek

LOE ID:	15830
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38907**	**Region 3**
Chorro Creek		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38907, Arsenic **Region 3**

Chorro Creek

LOE ID:	15655
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38907, Arsenic **Region 3**

Chorro Creek

LOE ID:	15642
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41940** **Region 3**

Chorro Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41940, Benzo(a)anthracene **Region 3**

Chorro Creek

LOE ID:	14834
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41940, Benzo(a)anthracene **Region 3**

Chorro Creek

LOE ID:	14818
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	41939	Region 3
Chorro Creek		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41939, Benzo(a)pyrene (3,4-Benzopyrene -7-d)	**Region 3**
Chorro Creek	

LOE ID:	15578
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41939, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Chorro Creek

LOE ID:	15591
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38602**	**Region 3**
Chorro Creek		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38602, Cadmium **Region 3**

Chorro Creek

LOE ID:	15440
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38602, Cadmium **Region 3**

Chorro Creek

LOE ID:	15439
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38594** **Region 3**

Chorro Creek

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Two chromium samples are listed in the Line of Evidence (LOEs16805 and16806) however, this is an error and only one sampel was collected on April 1, 2004 from Chorro Creek. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample was also tested to toxic effects to invertebrates but did not result in significant toxic effects (see LOEs23804 and 23805). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38594, Chromium **Region 3**

Chorro Creek

LOE ID:	16086
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38594, Chromium **Region 3**

Chorro Creek

LOE ID:	23805
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38594, Chromium **Region 3**

Chorro Creek

LOE ID:	16085

Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38594, Chromium **Region 3**

Chorro Creek

LOE ID:	23804
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when

	compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41992**	**Region 3**
Chorro Creek		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41992, Chrysene (C1-C4) **Region 3**

Chorro Creek

LOE ID:	15967
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41992, Chrysene (C1-C4) **Region 3**

Chorro Creek

LOE ID:	15966
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38762** **Region 3**

Chorro Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of

the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38762, Copper **Region 3**

Chorro Creek

LOE ID:	16049
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38762, Copper **Region 3**

Chorro Creek

LOE ID:	16050
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41942	Region 3
Chorro Creek		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41942, Dieldrin	**Region 3**
Chorro Creek	

LOE ID:	16725
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41942, Dieldrin **Region 3**

Chorro Creek

LOE ID:	16724
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41943** **Region 3**

Chorro Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41943, Endrin **Region 3**

Chorro Creek

LOE ID:	16576
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41943, Endrin **Region 3**

Chorro Creek

LOE ID:	16575
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42581**	**Region 3**
Chorro Creek		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42581, Fluoranthene **Region 3**

Chorro Creek

LOE ID:	16422
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42581, Fluoranthene **Region 3**

Chorro Creek

LOE ID:	16423
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42531**	**Region 3**
Chorro Creek		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding

that pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42531, Fluorene **Region 3**

Chorro Creek

LOE ID:	16491
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42531, Fluorene **Region 3**

Chorro Creek

LOE ID:	16492
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38887** **Region 3**

Chorro Creek

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38887, Lead **Region 3**

Chorro Creek

LOE ID:	17373
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2

	samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38887, Lead **Region 3**

Chorro Creek

LOE ID:	17372
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38977 Region 3

Chorro Creek

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38977, Mercury Region 3

Chorro Creek

LOE ID:	17205

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38977, Mercury **Region 3**

Chorro Creek

LOE ID:	17218
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42542**	**Region 3**
Chorro Creek		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42542, Naphthalene — Region 3

Chorro Creek

LOE ID:	17272
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42542, Naphthalene — Region 3

Chorro Creek

LOE ID:	17271
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39050** **Region 3**

Chorro Creek

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Two chromium samples are listed in the Line of Evidence (LOEs17107 and17106) however, this is an error and only one sampel was collected on April 1, 2004 from Chorro Creek. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample was also tested to toxic effects to invertebrates but did not result in significant toxic effects (see LOEs23804 and 23805). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient

information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39050, Nickel **Region 3**

Chorro Creek

LOE ID:	23804
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39050, Nickel **Region 3**

Chorro Creek

LOE ID:	23805
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39050, Nickel **Region 3**

Chorro Creek

LOE ID:	17106
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39050, Nickel **Region 3**

Chorro Creek

LOE ID:	17107
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42584** **Region 3**

Chorro Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
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Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42584, Phenanthrene **Region 3**

Chorro Creek

LOE ID:	16939
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42584, Phenanthrene **Region 3**

Chorro Creek

LOE ID:	16940
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41906** **Region 3**

Chorro Creek

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed.

Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41906, Pyrene **Region 3**

Chorro Creek

LOE ID:	17070
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41906, Pyrene **Region 3**

Chorro Creek

LOE ID:	17057
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38390	Region 3
Chorro Creek		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38390, Zinc	**Region 3**
Chorro Creek	

LOE ID:	17699
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38390, Zinc **Region 3**

Chorro Creek

LOE ID:	17685
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Chorro Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Chorro Creek was collected at 1 monitoring site [310TWB-Chorro Creek at South Bay Boulevard]
Temporal Representation:	Data was collected on a single day 4/1/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 32775 — Region 3

Chorro Creek

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Agriculture | Channel Erosion | Erosion/Siltation | Grazing-Related Sources | Highway/Road/Bridge Construction | Land Development
TMDL Name:	Morro Bay Sediment
TMDL Project Code:	242
Date TMDL Approved by USEPA:	01/20/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. The Morro Bay Sediment TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32775, Sedimentation/Siltation — Region 3

Chorro Creek

LOE ID:	1900
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Walters Creek**
Water Body ID: **CAR3102201120021002231800**
Water Body Type: **River & Stream**

DECISION ID **48836** **Region 3**
Walters Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Two of 9 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 9 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48836, Escherichia coli (E. coli) **Region 3**
Walters Creek

LOE ID: 47818

Pollutant: Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 8/6/2002 2:06:00 PM-1/5/2006 8:15:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	**53015**	**Region 3**
Walters Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. Although two of the 6 samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations), there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 6 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. Although two of the 6 samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration but there is not supporting evidence of eutrophic conditions. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53015, Nitrate **Region 3**

Walters Creek

LOE ID:	47820
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53015, Nitrate **Region 3**

Walters Creek

LOE ID:	47821
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53015, Nitrate **Region 3**

Walters Creek

LOE ID:	47819
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	**52384**	**Region 3**
Walters Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 5 samples exceeded the water quality objectives for dissolved oxygen in both Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â"for

waters not mentioned by a specific beneficial useÂ…Â" and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 5 samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52384, Oxygen, Dissolved **Region 3**

Walters Creek

LOE ID:	47835
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 52384, Oxygen, Dissolved **Region 3**

Walters Creek

LOE ID:	47822
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 52384, Oxygen, Dissolved **Region 3**

Walters Creek

LOE ID:	47823
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 52384, Oxygen, Dissolved **Region 3**

Walters Creek

LOE ID:	47824
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID **53016** **Region 3**

Walters Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53016, Temperature, water **Region 3**

Walters Creek

LOE ID:	47853
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID **53017** **Region 3**

Walters Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 0 of the 6 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 6 samples exceed the evaluation guideline for both Cold and Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53017, Turbidity **Region 3**

Walters Creek

LOE ID:	47841
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53017, Turbidity **Region 3**

Walters Creek

LOE ID:	47852
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 53018 Region 3

Walters Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. Two of the 6 samples exceed the water quality objectives for both Cold and Warm Freshwater Habitats. Zero of the 6 samples exceed the water quality objectives for Drinking Water and Recreation. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 6 samples exceed the water quality objectives for both Cold and Warm Freshwater Habitats. Zero of the 6 samples exceed the water quality objectives for Drinking Water and Recreation and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53018, pH Region 3

Walters Creek

LOE ID:	47840

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53018, pH **Region 3**

Walters Creek

LOE ID:	47838
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53018, pH **Region 3**

Walters Creek

LOE ID:	47837
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53018, pH **Region 3**

Walters Creek

LOE ID:	47836
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53018, pH **Region 3**

Walters Creek

LOE ID:	47839
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Walters Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Walters Creek was collected at 1 monitoring site [310WAL-Walters Creek]
Temporal Representation:	Data was collected over the time period 12/15/2002 11:15:00 AM-1/29/2008 2:38:00 PM.

Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 34447 Region 3

Walters Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list. USEPA in its final decision for the 2006 303(d) list, has determined that a TMDL has not been approved by USEPA for this pollutant water body combination. Therefore, this water body pollutant combination is being placed back on the 303(d) list (TMDL required list) pending completion and USEPA approval of a TMDL.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34447, Fecal Coliform Region 3

Walters Creek

LOE ID:	1899
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	

Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Chumash Creek**
Water Body ID: **CAR3102201120021001213514**
Water Body Type: **River & Stream**

DECISION ID **53290** **Region 3**
Chumash Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the water quality objective for Municipal and Domestic Supply and zero of the seven samples exceed the evaluation guideline for Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the seven samples exceed the water quality objective for Municipal and Domestic Supply and zero of the seven samples exceed the evaluation guideline for Cold and Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53290, Nitrate **Region 3**
Chumash Creek

LOE ID: 47742

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53290, Nitrate **Region 3**

Chumash Creek

LOE ID:	47743
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53290, Nitrate **Region 3**

Chumash Creek

LOE ID:	47741
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [

	310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID **47196** **Region 3**

Chumash Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 7 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 7 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47196, Temperature, water **Region 3**

Chumash Creek

LOE ID:	47924
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	47197	Region 3
Chumash Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 7 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984) and the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 7 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47197, Turbidity **Region 3**

Chumash Creek

LOE ID:	47916
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47197, Turbidity **Region 3**

Chumash Creek

LOE ID:	47923
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	47198	Region 3
Chumash Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Zero of the 7 samples exceeded the water quality objectives for Drinking Water and Recreation and 1 of the 7 samples exceed the water quality objective for Cold Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 7 samples exceeded the water quality objectives for Drinking Water and Recreation and

1 of the 7 samples exceed the water quality objective for Cold Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47198, pH **Region 3**

Chumash Creek

LOE ID:	47912
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47198, pH **Region 3**

Chumash Creek

LOE ID:	47911
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47198, pH **Region 3**

Chumash Creek

LOE ID:	47915
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer

	concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47198, pH **Region 3**

Chumash Creek

LOE ID:	47914
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 47198, pH **Region 3**

Chumash Creek

LOE ID:	47913
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash

	Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID 47195 Region 3

Chumash Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Thirteen of the 37 samples exceed the USEPA Ambient Water Quality Criteria for Bacteria (1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of the 37 samples exceed the USEPA Ambient Water Quality Criteria for Bacteria and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47195, Escherichia coli (E. coli) Region 3

Chumash Creek

LOE ID:	48017
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 13 of 37 samples exceed the criterion for Escherichia coli.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/4/2003 2:45:00 PM-6/7/2006 12:00:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID **33609** **Region 3**

Chumash Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Forty-two of the 252 samples exceed the water quality objective for cold freshwater habitat. The most recent data is also evaluated using the warm freshwater habitat objective and 2 of 7 samples exceed the evaluation guideline. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â"for waters not mentioned by a specific beneficial useÂ…Â" and this water body is designated for both Cold

and Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-two of the 252 samples exceed the water quality objective for cold freshwater habitat and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 33609, Oxygen, Dissolved **Region 3**

Chumash Creek

LOE ID:	47910
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33609, Oxygen, Dissolved **Region 3**

Chumash Creek

LOE ID:	47746
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33609, Oxygen, Dissolved **Region 3**

Chumash Creek

LOE ID:	47745
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin

	Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33609, Oxygen, Dissolved **Region 3**

Chumash Creek

LOE ID:	47744
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Chumash Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chumash Creek was collected at 1 monitoring site [310CHU - Chumash Creek, named tributary to Pennington.]
Temporal Representation:	Data was collected over the time period 2/12/2003 3:25:00 PM-4/1/2005 2:15:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33609, Oxygen, Dissolved **Region 3**

Chumash Creek

LOE ID:	1898
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	245
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Chumash Creek was placed on the 2002 303(d) list as impaired from dissolved oxygen because levels fell below the COLD freshwater habitat water quality objective of 7 mg/l. Forty samples of a total of 245 samples taken between 1993 and 2003 fall below this value (CCRWQCB, 2004k).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	COLD freshwater habitat water quality objective for D.O. = 7 mg/l (minimum).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Measurements were taken at 310CHU on Chumash Creek, Calwater watershed no. 31022012.
Temporal Representation:	Two hundred forty five samples were collected over a ten year period of 6/8/1993-7/16/2003. Samples were collected on a monthly or bi-monthly basis.
Environmental Conditions:	
QAPP Information:	Water column data collected by RWQCB staff in 1993-2001 were taken according to the National Monitoring Program Quality Assurance Program Plan. Samples taken in 2003 by the Morro Bay Volunteer Monitoring Program were taken according to protocols for dissolved oxygen sampling in the Morro Bay National Estuary Program's Quality Assurance Program Plan. The Morro Bay Volunteer Monitoring Program staff have routine correspondence with volunteers regarding data review, meter operation, and safety. Volunteer monitors collect dissolved oxygen data according to the Morro Bay National Estuary Program's Quality Assurance Program Plan.
QAPP Information Reference(s):	

DECISION ID	**32776**	**Region 3**
Chumash Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for removal on the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under section 4.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality

Limited Segments Being Addressed portion of the section 303(d) list.

Although a TMDL has been approved by USEPA for Chorro Creek Pathogens, USEPA has determined that a TMDL has not been approved for this pollutant waterbody combination (Chumash Creek pathogens). Therefore, this water body pollutant combination is being placed back on the 303(d) list (TMDL required list) pending completion and USEPA approval of a TMDL.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy of 246 samples exceed the water quality objective, and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32776, Fecal Coliform **Region 3**

Chumash Creek

LOE ID:	1896
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified-- This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32776, Fecal Coliform **Region 3**

Chumash Creek

LOE ID:	1897
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	246
Number of Exceedances:	70
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Seventy of 246 samples exceed the water quality objective.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One station was monitored on Chumash Creek.
Temporal Representation:	Weekly and bi-weekly sampling events occurred from 6/93 to 5/99.
Environmental Conditions:	
QAPP Information:	Morro Bay National Monitoring Program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Luisito Creek**
Water Body ID: **CAR3102201120020124141107**
Water Body Type: **River & Stream**

DECISION ID **53005** **Region 3**
San Luisito Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 126 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. One of the 126 nitrate samples exceed the water quality objectives for Cold Freshwater Habitat.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 126 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. One of the 126 nitrate samples exceed the water quality objectives for Cold Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53005, Nitrate **Region 3**
San Luisito Creek

LOE ID: 47807

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 0 of 126 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53005, Nitrate **Region 3**

San Luisito Creek

LOE ID:	47805
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	126
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 0 of 126 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53005, Nitrate **Region 3**

San Luisito Creek

LOE ID:	47806
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	126
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 1 of 126 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	51235	Region 3
San Luisito Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 142 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 142 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51235, Oxygen, Dissolved	**Region 3**
San Luisito Creek	

LOE ID:	47808
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	128
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 3 of 128 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51235, Oxygen, Dissolved **Region 3**

San Luisito Creek

LOE ID:	47810
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	127
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 18 of 127 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51235, Oxygen, Dissolved **Region 3**

San Luisito Creek

LOE ID:	47800

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: The daily minimum dissolved oxygen concentration was evaluated for 14 sample days and one monitoring site on San Luisito Creek and the criterion was never exceeded.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 1 monitoring site [310SLU - upper San Luisito Creek]
Temporal Representation:	Data was collected over the time period May 29, 2008 - April 2, 2010
Environmental Conditions:	Dissolved oxygen data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the minimum value for each sample day was compared to the water quality objective as defined in Section
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 51235, Oxygen, Dissolved **Region 3**

San Luisito Creek

LOE ID:	47801
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: The daily median oxygen saturation value was evaluated for 14 sample days and one monitoring site on San Luisito Creek and the criterion was never exceeded.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 1 monitoring site [310SLU - upper San Luisito Creek]
Temporal Representation:	Data was collected over the time period May 29, 2008 - April 2, 2010
Environmental Conditions:	Oxygen Saturation data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily median value for each sample day was compared to the water quality objective as defined in S
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID 53006 Region 3

San Luisito Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 139 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 139 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53006, Specific Conductivity Region 3

San Luisito Creek

LOE ID:	47798
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: The daily average conductivity concentration was calculated for 14 sample days at one San Luisito Creek site and never exceeded the criterion.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 1 monitoring site [310SLU - upper San Luisito Creek]
Temporal Representation:	Data was collected over the time period May 29, 2008 - April 2, 2010
Environmental Conditions:	Conductivity data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily average conductivity was compared to the water quality objective as defined in Section 6.1.5.6 of
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53006, Specific Conductivity **Region 3**

San Luisito Creek

LOE ID:	47804
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	125
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 0 of 125 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID **53007** **Region 3**

San Luisito Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 142 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 142 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53007, Temperature, water **Region 3**

San Luisito Creek

LOE ID:	47803

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: The daily maximum water temperature was evaluated for 14 sample days at one monitoring site on San Luisito Creek and never exceeded the criterion.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 1 monitoring site [310SLU - San Luisito Creek]
Temporal Representation:	Data was collected over the time period May 29, 2008 - April 2, 2010
Environmental Conditions:	Water temperature data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily maximum temperature was compared to the water quality objective as defined in Section 6.1.5.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53007, Temperature, water **Region 3**

San Luisito Creek

LOE ID:	47817
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 0 of 128 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 53004 Region 3

San Luisito Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the 127 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 127 samples exceed the evaluation guideline for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53004, Turbidity Region 3

San Luisito Creek

LOE ID:	47816
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	127
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 3 of 127 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID	53008	Region 3
San Luisito Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Three of the 128 samples exceed the water quality objectives for Cold Freshwater Habitat and zero of the 128 samples exceed the water quality objectives for Agricultural Supply, Drinking Water, and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 128 samples exceed the water quality objectives for Cold Freshwater Habitat and zero

of the 128 samples exceed the water quality objectives for Agricultural Supply, Drinking Water, and Recreation. and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53008, pH **Region 3**

San Luisito Creek

LOE ID:	47811
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 0 of 128 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53008, pH **Region 3**

San Luisito Creek

LOE ID:	47812
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	128
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 3 of 128 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53008, pH **Region 3**

San Luisito Creek

LOE ID:	47813
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 0 of 128 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53008, pH **Region 3**

San Luisito Creek

LOE ID:	47814
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 0 of 128 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 53008, pH **Region 3**

San Luisito Creek

LOE ID:	47815
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	128
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 0 of 128 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 2 monitoring sites [310SLU - San Luisito Creek, 310OSL - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 7/16/2002 3:30:00 PM-3/1/2010 1:20:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID	48823	Region 3
San Luisito Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Eighty-four of 106 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighty-four of 106 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 48823, Escherichia coli (E. coli) **Region 3**

San Luisito Creek

LOE ID:	47802
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	106
Number of Exceedances:	84
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for San Luisito Creek to determine beneficial use support and results are as follows: 84 of 106 samples exceed the criterion for Escherichia coli.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Luisito Creek was collected at 1 monitoring site [310SLU - San Luisito Creek]
Temporal Representation:	Data was collected over the time period 2/4/2003 3:05:00 PM-2/25/2010 10:55:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID **32849** **Region 3**

San Luisito Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

	One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list. USEPA in its final decision for the 2006 303(d) list, has determined that a TMDL has not been approved by USEPA for this pollutant water body combination. Therefore, this water body pollutant combination is being placed back on the 303(d) list (TMDL required list) pending completion and USEPA approval of a TMDL.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32849, Fecal Coliform **Region 3**

San Luisito Creek

LOE ID:	1895
Pollutant:	Fecal Coliform
LOE Subgroup:	Remedial Program in Place
Matrix:	Not Specified
Fraction:	
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pennington Creek**
Water Body ID: **CAR3102201120020124123809**
Water Body Type: **River & Stream**

DECISION ID **41205** **Region 3**
Pennington Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 156 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Four of the 153 nitrate samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 153 nitrate samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use. and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41205, Nitrate **Region 3**
Pennington Creek

LOE ID: 47767

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	153
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 4 of 153 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41205, Nitrate **Region 3**

Pennington Creek

LOE ID:	47768
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	153
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 153 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41205, Nitrate **Region 3**

Pennington Creek

LOE ID:	47769
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	153
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 4 of 153 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with

	the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41205, Nitrate **Region 3**

Pennington Creek

LOE ID:	18187
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41779** **Region 3**

Pennington Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Ten of the 162 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and two of the 162 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 162 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and two of the 162 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	47770
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	155
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 10 of 155 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	47771
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	155
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 2 of 155 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	47772
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	151
Number of Exceedances:	52
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 52 of 151 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	47773
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	151
Number of Exceedances:	52
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 52 of 151 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	18254
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	18253
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	47764
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Pennington Creek to determine beneficial use support and results are as follows: The daily median oxygen saturation value was evaluated for four sample days and one monitoring site on Pennington Creek and the criterion was never exceeded.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [

	310PEN - Pennington Creek]
Temporal Representation:	Data was collected over the time period January 6, 2009-January 9, 2009
Environmental Conditions:	Oxygen Saturation data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily median value for each sample day was compared to the water quality objective as defined in S
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	47763
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Pennington Creek to determine beneficial use support and results are as follows: The daily median oxygen saturation value was evaluated for four sample days and one monitoring site on Pennington Creek and the criterion was never exceeded.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310PEN - Pennington Creek]
Temporal Representation:	Data was collected over the time period January 6, 2009-January 9, 2009
Environmental Conditions:	Oxygen Saturation data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily median value for each sample day was compared to the water quality objective as defined in S
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	47761
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Pennington Creek to determine beneficial use support and results are as follows: The daily minimum dissolved oxygen concentration was evaluated for four sample days and one monitoring site on Pennington Creek and the criterion was never exceeded.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310PEN - Pennington Creek]
Temporal Representation:	Data was collected over the time period January 6, 2009-January 9, 2009
Environmental Conditions:	Dissolved oxygen data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the minimum value for each sample day was compared to the water quality objective as defined in Section
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41779, Oxygen, Dissolved **Region 3**

Pennington Creek

LOE ID:	47760
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Pennington Creek to determine beneficial use support and results are as follows: The daily minimum dissolved oxygen concentration was evaluated for four sample days and one monitoring site on Pennington Creek and the criterion was never exceeded.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310PEN - Pennington Creek]
Temporal Representation:	Data was collected over the time period January 6, 2009-January 9, 2009
Environmental Conditions:	Dissolved oxygen data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the minimum value for each sample day was compared to the water quality objective as defined in Section
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 49115 Region 3

Pennington Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49115, Specific Conductivity Region 3

Pennington Creek

LOE ID:	47759
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Pennington Creek to determine beneficial use support and results are as follows: The daily average conductivity concentration was calculated for 4 sample days at Pennington Creek sites and never exceeded the criterion.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310PEN - Pennington Creek]
Temporal Representation:	Data was collected over the time period January 6, 2009-January 9, 2009
Environmental Conditions:	Conductivity data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily average conductivity was compared to the water quality objective as defined in Section 6.1.5.6 of
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	41618	Region 3
Pennington Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 162 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 162 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41618, Temperature, water **Region 3**

Pennington Creek

LOE ID:	47765
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Pennington Creek to determine beneficial use support and results are as follows: The daily maximum water temperature was evaluated for 4 sample days at one monitoring site on Pennington Creek and never exceeded the criterion.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310PEN - Pennington Creek]
Temporal Representation:	Data was collected over the time period January 6, 2009-January 9, 2009
Environmental Conditions:	Water temperature data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily maximum temperature was compared to the water quality objective as defined in Section 6.1.5.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41618, Temperature, water **Region 3**

Pennington Creek

LOE ID:	47781

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	155
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 155 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41618, Temperature, water **Region 3**

Pennington Creek

LOE ID:	18819
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be

	demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41669 Region 3
Pennington Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 157 samples exceed the evaluation guidelines for Cold Freshwater Habitat (Sigler et al. 1984) and Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 157 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41669, Turbidity Region 3
Pennington Creek

LOE ID:	47779

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	154
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 2 of 154 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41669, Turbidity **Region 3**

Pennington Creek

LOE ID:	47780
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	154
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 2 of 154 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41669, Turbidity **Region 3**

Pennington Creek

LOE ID:	18725
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41669, Turbidity **Region 3**

Pennington Creek

LOE ID:	18726
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41670** **Region 3**

Pennington Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Nine of the 159 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and two of the 159 samples exceed the water quality objectives for Drinking Water and Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the 159 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and two of the 159 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	18941
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	47778
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	156
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 9 of 156 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	47777
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	156
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 2 of 156 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	47776
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	156
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 2 of 156 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	47775
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	156
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 2 of 156 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	47774
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	156
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 9 of 156 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310PEN - Pennington Creek, 310CPN - Cal Poly Pennington]
Temporal Representation:	Data was collected over the time period 6/4/2002 3:00:00 PM-3/1/2010 11:30:00 AM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	18940
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	18988
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	18987
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41670, pH **Region 3**

Pennington Creek

LOE ID:	18942
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41256** **Region 3**

Pennington Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. Coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Sixty four of 123 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 2 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty four of 123 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41256, Escherichia coli (E. coli) **Region 3**

Pennington Creek

LOE ID:	47766
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	63
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pennington Creek to determine beneficial use support and results are as follows: 63 of 121 samples exceed the criterion for Escherichia coli.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 2 monitoring sites [310CPN - Cal Poly Pennington, 310PEN - Pennington Creek]
Temporal Representation:	Data was collected over the time period 8/16/2002 1:40:00 PM-2/8/2010 9:56:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 41256, Escherichia coli (E. coli) Region 3

Pennington Creek

LOE ID:	18406
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41256, Escherichia coli (E. coli) Region 3

Pennington Creek

LOE ID:	18405
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **32872** **Region 3**

Pennington Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for listing under section 2.2 and 3.2 of the Listing Policy. Under these sections of the Policy, a minimum of one line of evidence is needed to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The original listing was based on data collected by the National Monitoring Program at Morro Bay. Very little new data is available for this water segment-pollutant combination. The single sample exceeds the Water Contact Recreation water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.

USEPA in its final decision for the 2006 303(d) list, has determined that a TMDL has not been approved by USEPA for this pollutant water body combination. Therefore, this water body pollutant combination is being placed back on the 303(d) list (TMDL required list) pending completion and USEPA approval of a TMDL. However, a TMDL was approved by USEPA for fecal coliform in Chorro Creek (the receiving water for Pennington Creek) on January 20, 2004.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32872, Fecal Coliform **Region 3**

Pennington Creek

LOE ID:	17403
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32872, Fecal Coliform **Region 3**

Pennington Creek

LOE ID:	17404
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pennington Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pennington Creek was collected at 1 monitoring site [310-PENN-41 - Pennington Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32872, Fecal Coliform **Region 3**

Pennington Creek

LOE ID:	1894
Pollutant:	Fecal Coliform
LOE Subgroup:	Remedial Program in Place
Matrix:	Not Specified
Fraction:	
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Dairy Creek**
Water Body ID: **CAR3102201019990225114123**
Water Body Type: **River & Stream**

DECISION ID	34663	Region 3
Dairy Creek		

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Grazing-Related Sources
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Forty-two of 201 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats use. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information.

A TMDL was completed and approved by the Central Coast Water Board in which grazing was identified as a source of excessive nutrients causing the low dissolved oxygen impairment. The TMDL has not been approved by USEPA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-two of 201 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Dairy Creek Dissolved Oxygen TMDL has been approved by the Central Coast Water Board on December 3, 2004 but has not been approved by USEPA. Management actions continue to be implemented to improve water quality.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

A TMDL was completed and approved by the Central Coast Water Board in which grazing was identified as a source of excessive nutrients causing the low dissolved oxygen impairment. The TMDL

has not been approved by USEPA.

Line of Evidence (LOE) for Decision ID 34663, Oxygen, Dissolved **Region 3**

Dairy Creek

LOE ID:	48001
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	182
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 35 of 182 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 34663, Oxygen, Dissolved **Region 3**

Dairy Creek

LOE ID:	48003
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	179
Number of Exceedances:	91
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 91 of 179 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 34663, Oxygen, Dissolved **Region 3**

Dairy Creek

LOE ID:	18074
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34663, Oxygen, Dissolved — Region 3

Dairy Creek

LOE ID:	47970
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Dairy Creek to determine beneficial use support and results are as follows: The daily minimum dissolved oxygen concentration was evaluated for 16 sample days and two monitoring sites on Dairy Creek and the criterion was exceeded 7 times.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 2 monitoring sites [310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period January 24, 2006 - April 2, 2010
Environmental Conditions:	Dissolved oxygen data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the minimum value for each sample day was compared to the water quality objective as defined in Section
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 34663, Oxygen, Dissolved — Region 3

Dairy Creek

LOE ID:	1893
Pollutant:	Low Dissolved Oxygen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34663, Oxygen, Dissolved **Region 3**

Dairy Creek

LOE ID:	47972
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Dairy Creek to determine beneficial use support and results are as follows: The daily median oxygen saturation value was evaluated for 19 sample days and two monitoring sites on Dairy Creek and the criterion was exceeded 13 times.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 2 monitoring sites [310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period January 24, 2006 - April 2, 2010
Environmental Conditions:	Oxygen Saturation data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily median value for each sample day was compared to the water quality objective as defined in S
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program, Jan. 12, 2010, Version 5, Draft 2

DECISION ID **38986** **Region 3**

Dairy Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 183 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Six of the 180 nitrate samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 183 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial use. Six of the 180 nitrate samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38986, Nitrate **Region 3**

Dairy Creek

LOE ID:	47990
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	180
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 180 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/19/2010 10:30:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38986, Nitrate **Region 3**

Dairy Creek

LOE ID:	47988
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	180
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 180 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/19/2010 10:30:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38986, Nitrate **Region 3**

Dairy Creek

LOE ID:	47989
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	180
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 6 of 180 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/19/2010 10:30:00 AM.
Environmental Conditions:	Nitrate data was collected using a screening level test kit. Quality control is consistant with the QAPP.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38986, Nitrate **Region 3**

Dairy Creek

LOE ID:	18322
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38986, Nitrate **Region 3**

Dairy Creek

LOE ID:	18321
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate

	exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38779 — Region 3

Dairy Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 201 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 201 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38779, Specific Conductivity — Region 3

Dairy Creek

LOE ID:	47974
Pollutant:	Specific Conductivity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	179
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 179 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38779, Specific Conductivity **Region 3**

Dairy Creek

LOE ID:	47959
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Dairy Creek to determine beneficial use support and results are as follows: The daily average conductivity concentration was calculated for 19 sample days at Dairy Creek sites and never exceeded the criterion.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 2 monitoring sites [310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period January 24, 2006 - April 2, 2010
Environmental Conditions:	Conductivity data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily average conductivity was compared to the water quality objective as defined in Section 6.1.5.6 of
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38779, Specific Conductivity **Region 3**

Dairy Creek

LOE ID:	17568
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38987 Region 3
Dairy Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Two of the 204 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 204 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38987, Temperature, water Region 3
Dairy Creek

LOE ID:	47973
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Dairy Creek to determine beneficial use support and results are as follows: The daily maximum water temperature was evaluated for 19 sample days at two monitoring sites on Dairy Creek and

	never exceeded the criterion.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 2 monitoring sites [310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period January 24, 2006 - April 2, 2010
Environmental Conditions:	Water temperature data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily maximum temperature was compared to the water quality objective as defined in Section 6.1.5.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38987, Temperature, water **Region 3**

Dairy Creek

LOE ID:	48021
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	182
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 2 of 182 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38987, Temperature, water **Region 3**

Dairy Creek

LOE ID:	18815
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38477** **Region 3**

Dairy Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 184 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 184 samples exceed the cold freshwater habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38477, Turbidity **Region 3**

Dairy Creek

LOE ID:	48020
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	181
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 3 of 181 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer

Line of Evidence (LOE) for Decision ID 38477, Turbidity **Region 3**

Dairy Creek

LOE ID:	18687
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38926** **Region 3**

Dairy Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. One of the 182 samples exceed the water quality objectives for Agricultural supply, Drinking Water and Recreation and 8 of the 182 samples exceed the water quality objective for Cold Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 182 samples exceed the water quality objectives for Agricultural supply, Drinking Water and Recreation and 8 of the 182 samples exceed the water quality objective for Cold Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	18261
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	17966
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	17968
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	17969
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	17967
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	48005
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	179
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 8 of 179 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	48004
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	179
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 1 of 179 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	48019
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	179
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 1 of 179 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	48018
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	179
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 1 of 179 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.
Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 38926, pH **Region 3**

Dairy Creek

LOE ID:	48006
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	179
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 1 of 179 samples exceed the criterion for pH.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 7/17/2002 4:30:00 PM-2/26/2010 1:20:00 PM.

Environmental Conditions:	pH was measured using test strips. In recent communication with the program QA officer concern has been raised about underestimation of the result with test strips.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID 47220 Region 3
Dairy Creek

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Six of the 8 samples exceed the USEPA Ambient Water Quality Criteria for Bacteria (1986). Note, a TMDL for fecal coliform has been completed and approved by RWQCB and USEPA, and although a TMDL for Enterococcus is not specifically established it is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 8 samples exceed the USEPA Ambient Water Quality Criteria for Bacteria and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Morro Bay Watershed Pathogen TMDL has been approved by the USEPA on January 20, 2004. However, a TMDL for Enterococcus is not specifically established. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47220, Enterococcus Region 3
Dairy Creek

LOE ID:	47986
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Enterococci.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in marine waters is 104 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 8/10/2005 8:03:00 AM-7/31/2006 8:15:00 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	38985	Region 3
Dairy Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Fifty-nine of the 159 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). However, the segment within the cattle exclusion is not impaired as is evident from the data collected at the monitoring station immediately adjacent to the downstream edge of the exclusion (station 310DAM). At that station, 9 of the 60 samples exceed the criteria. Note, a TMDL for fecal coliform has been completed and approved by RWQCB and USEPA, and although a TMDL for E. coli is not specifically established, it is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-nine of the 159 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. However, the segment within the cattle exclusion is not impaired as is evident from the data collected at the monitoring station immediately adjacent to the downstream edge of the exclusion (station 310DAM). At that station, 9 of the 60 samples exceed the criteria and this does not exceed the allowable frequency in Table 3.2 of the Listing Policy.
4. The Morro Bay Watershed Pathogen TMDL has been approved by the USEPA on January 20, 2004. However, a TMDL for E. coli is not specifically established.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38985, Escherichia coli (E. coli) **Region 3**

Dairy Creek

LOE ID:	18434
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38985, Escherichia coli (E. coli) **Region 3**

Dairy Creek

LOE ID:	18435
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38985, Escherichia coli (E. coli) **Region 3**

Dairy Creek

LOE ID:	47987
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	157
Number of Exceedances:	58
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Dairy Creek to determine beneficial use support and results are as follows: 58 of 157 samples exceed the criterion for Escherichia coli when data from all three stations are combined.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 3 monitoring sites [310DAL - Dairy Creek Lower, 310DAM - Dairy Creek Middle, 310DAU - Dairy Creek Upper]
Temporal Representation:	Data was collected over the time period 8/6/2002 1:50:00 PM-2/19/2010 1:28:00 PM.
Environmental Conditions:	Two sample stations bracket a cattle exclusion area on the creek. Twenty-four of the 38 samples collected from the station upstream of the exclusion area (310DAU) exceed the criterion. Nine of 60 samples collected from the station immediately downstream of the exclusion area (310DAM) exceed the criterion. Further downstream at station 310DAU, 25 of 59 samples exceed the criterion.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	32648	Region 3
Dairy Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Domestic Pet Waste | Grazing-Related Sources | Natural Sources | Transient encampments
TMDL Name:	Morro Bay Pathogens
TMDL Project Code:	22
Date TMDL Approved by USEPA:	01/20/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered placement the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One LOE (LOE #1892) is a placeholder from the original decision to add this water body pollutant combination to the 303(d) List but the does not contain data or information in this database. In LOE#17385 and #17386, one sample assessed for Contact and Non-Contact Recreation but this is insufficient in terms of sample count to revise the decision. Fecal Coliform data are not being collected in the water body and instead E. coli data are being collected. E. coli data indicated that the impaired reach does not include the fenced area within the cattle exclusion (between stations DAM and DAU). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result

in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. An unknown number of samples and exceedances of the water quality objective is the basis for the original decision to List this water body-pollutant combination.
4. A pathogen TMDL was completed for the entire Morro Bay watershed (including Dairy Creek) and approved by U.S. EPA on January 20, 2004.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32648, Fecal Coliform **Region 3**

Dairy Creek

LOE ID:	17385
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32648, Fecal Coliform **Region 3**

Dairy Creek

LOE ID:	1892
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32648, Fecal Coliform **Region 3**

Dairy Creek

LOE ID:	17386
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Dairy Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period

	exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Dairy Creek was collected at 1 monitoring site [310-DAL-41 - Dairy Creek, lower]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Morro Creek**
Water Body ID: **CAR3102101020020117164850**
Water Body Type: **River & Stream**

DECISION ID	41017	Region 3
Morro Creek		

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 13 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 14 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 14 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41017, Ammonia — Region 3

Morro Creek

LOE ID:	10013
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41017, Ammonia — Region 3

Morro Creek

LOE ID:	10014
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41017, Ammonia **Region 3**

Morro Creek

LOE ID:	10015
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41017, Ammonia **Region 3**

Morro Creek

LOE ID:	50674
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41017, Ammonia **Region 3**

Morro Creek

LOE ID:	50654
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41017, Ammonia **Region 3**

Morro Creek

LOE ID:	50703
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41035	Region 3
Morro Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for agricultural uses.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41035, Boron **Region 3**

Morro Creek

LOE ID:	50709
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41035, Boron **Region 3**

Morro Creek

LOE ID:	10016
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41131**	**Region 3**
Morro Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 12samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41131, Chloride **Region 3**

Morro Creek

LOE ID:	10029
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41131, Chloride **Region 3**

Morro Creek

LOE ID:	50710
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41144**	**Region 3**
Morro Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15

samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 15 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41144, Chlorophyll-a **Region 3**

Morro Creek

LOE ID:	50655
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41144, Chlorophyll-a **Region 3**

Morro Creek

LOE ID:	50713
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41144, Chlorophyll-a **Region 3**

Morro Creek

LOE ID:	10031
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41144, Chlorophyll-a **Region 3**

Morro Creek

LOE ID:	10030
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47335 **Region 3**

Morro Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for E.coli water contact recreation is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. One of 4 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47335, Escherichia coli (E. coli) — Region 3

Morro Creek

LOE ID:	50689
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41105**	**Region 3**
Morro Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 nitrate samples and zero of the 4 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. Two of the 4 nitrate samples and two of the 4 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. However, the Central Coast Region requires supporting evidence of eutrophication in the water segment and risk of eutrophic condition as predicted by the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) to justify a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. The following supporting evidence is insufficient to recommend listing this water segment for nitrate caused bio-stimulatory effects. 1) Dissolved oxygen for this water body ranged from 3.2 mg/L to 14.24 mg/L rarely exceeding (falling below) the Cold and Warm Freshwater Habitat water quality objectives of 7.0 and 5.0 mg/L (respectively), and at times exceeding the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Water column chlorophyll a concentrations peaked at 35.18 ug/L, exceeding the screening threshold of 15 ug/L once (R3 NNE Technical Report, 2010). 3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 1.28 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 4 nitrate samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. However, the supporting evidence is insufficient to recommend listing this water segment for nitrate caused bio-stimulatory effects.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, if the bio-stimulatory effects observed in this water segment are a result of nitrate concentrations.

Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID:	50656
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID:	50686
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID:	50685
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to

	determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID:	50657
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory

	Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID:	50723
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID:	50715
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID:	50714
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID:	50712
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID:	10045
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]

Temporal Representation: Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41105, Nitrate **Region 3**

Morro Creek

LOE ID: 10032

Pollutant: Nitrate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 10

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]

Temporal Representation: Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	48535	Region 3
Morro Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the four samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48535, Nitrogen, Nitrite	**Region 3**
Morro Creek	

LOE ID:	50724
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41088**	**Region 3**
Morro Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Two of the 14 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, one of the 14 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 14 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater

Habitats and one of the 14 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41088, Oxygen, Dissolved **Region 3**

Morro Creek

LOE ID:	50716
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41088, Oxygen, Dissolved **Region 3**

Morro Creek

LOE ID:	50670
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41088, Oxygen, Dissolved **Region 3**

Morro Creek

LOE ID:	50717
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41088, Oxygen, Dissolved **Region 3**

Morro Creek

LOE ID:	50669
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41088, Oxygen, Dissolved **Region 3**

Morro Creek

LOE ID:	12716

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41088, Oxygen, Dissolved **Region 3**

Morro Creek

LOE ID:	12713
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41088, Oxygen, Dissolved **Region 3**

Morro Creek

LOE ID:	12714
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-

	Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41088, Oxygen, Dissolved **Region 3**

Morro Creek

LOE ID:	12715
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41125** **Region 3**

Morro Creek

Pollutant: **Sodium**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41125, Sodium **Region 3**

Morro Creek

LOE ID:	10046
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41125, Sodium **Region 3**

Morro Creek

LOE ID:	50726
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41089	Region 3
Morro Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 15 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41089, Specific Conductivity	**Region 3**
Morro Creek	

LOE ID:	50711
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41089, Specific Conductivity **Region 3**

Morro Creek

LOE ID:	10919
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40956**	**Region 3**
Morro Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 14 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 14 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40956, Temperature, water — Region 3

Morro Creek

LOE ID:	12733
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40956, Temperature, water — Region 3

Morro Creek

LOE ID:	50673
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41114	Region 3
Morro Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 14 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and two of the 14 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 14 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41114, Turbidity **Region 3**

Morro Creek

LOE ID:	50672
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41114, Turbidity **Region 3**

Morro Creek

LOE ID:	50659

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41114, Turbidity **Region 3**

Morro Creek

LOE ID:	12732
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41114, Turbidity **Region 3**

Morro Creek

LOE ID:	12731
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]

Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41119 Region 3

Morro Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Two of the 14 samples exceed the water quality objectives for Agriculture, Drinking Water and Recreation and one of the 14 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 14 samples exceed the water quality objectives for Agriculture, Drinking Water and Recreation and one of the 14 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41119, pH Region 3

Morro Creek

LOE ID:	10938
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	10920
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	10937
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	10935
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	10934
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	10936
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	50687
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	50658
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	50671
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	50725
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	50699
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41119, pH **Region 3**

Morro Creek

LOE ID:	50701
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41090**	**Region 3**
Morro Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for Fecal Coliform non-contact recreation is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Five of 14 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 2 of 14 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 14 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41090, Fecal Coliform **Region 3**

Morro Creek

LOE ID:	50700
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41090, Fecal Coliform **Region 3**

Morro Creek

LOE ID:	50688
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Morro Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 1 monitoring site [310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 2/18/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41090, Fecal Coliform **Region 3**

Morro Creek

LOE ID:	10917
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 4 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41090, Fecal Coliform **Region 3**

Morro Creek

LOE ID:	10918
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Morro Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Creek was collected at 2 monitoring sites [310MOL-Morro Creek lagoon, 310MOR-Morro Creek at Lila Keiser Park]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Toro Creek**
Water Body ID: **CAR3101801020020124151249**
Water Body Type: **River & Stream**

DECISION ID	37019	Region 3
Toro Creek		

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The previous decision to add this water segment pollutant combination to the CWA section 303(d) List was based on oxygen saturation data only. This is incorrect because the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Eight lines of evidence are available in the administrative record to assess this pollutant. Two of the 64 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 21 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The previous decision was incorrect because the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats.
4. Two of the 21 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 21 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should be removed from the section 303(d) list. The originally listing was based on the inappropriate water quality objective for oxygen saturation. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37019, Oxygen, Dissolved **Region 3**

Toro Creek

LOE ID:	13395
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37019, Oxygen, Dissolved **Region 3**

Toro Creek

LOE ID:	13379
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 2 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37019, Oxygen, Dissolved **Region 3**

Toro Creek

LOE ID:	13380
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37019, Oxygen, Dissolved **Region 3**

Toro Creek

LOE ID:	13396
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37019, Oxygen, Dissolved **Region 3**

Toro Creek

LOE ID:	52447
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37019, Oxygen, Dissolved **Region 3**

Toro Creek

LOE ID:	52468
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37019, Oxygen, Dissolved **Region 3**

Toro Creek

LOE ID:	52469
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37019, Oxygen, Dissolved **Region 3**

Toro Creek

LOE ID:	52446
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36825** **Region 3**

Toro Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Ten of 21 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 21 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 21 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36825, Fecal Coliform **Region 3**

Toro Creek

LOE ID:	52487
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period

	exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36825, Fecal Coliform **Region 3**

Toro Creek

LOE ID:	52429
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 36825, Fecal Coliform — Region 3

Toro Creek

LOE ID:	11853
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36825, Fecal Coliform — Region 3

Toro Creek

LOE ID:	11852
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37528**	**Region 3**
Toro Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 21 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 21 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 21 samples exceed the water quality objective for unionized ammonia and zero of the 21 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37528, Ammonia **Region 3**

Toro Creek

LOE ID:	9957
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37528, Ammonia — Region 3

Toro Creek

LOE ID:	9944
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37528, Ammonia — Region 3

Toro Creek

LOE ID:	9943
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37528, Ammonia **Region 3**

Toro Creek

LOE ID:	52453
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37528, Ammonia **Region 3**

Toro Creek

LOE ID:	52432
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37528, Ammonia **Region 3**

Toro Creek

LOE ID:	52473

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36654** **Region 3**

Toro Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table

3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36654, Boron **Region 3**

Toro Creek

LOE ID:	52424
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36654, Boron **Region 3**

Toro Creek

LOE ID:	9958
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36806** **Region 3**

Toro Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 16 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 16 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36806, Chloride **Region 3**

Toro Creek

LOE ID:	9959
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36806, Chloride **Region 3**

Toro Creek

LOE ID:	52425
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	38634	Region 3
Toro Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38634, Chlorophyll-a	**Region 3**
Toro Creek	

LOE ID:	52454
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the

	criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38634, Chlorophyll-a **Region 3**

Toro Creek

LOE ID:	52443
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38634, Chlorophyll-a **Region 3**

Toro Creek

LOE ID:	13377
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural

	Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38634, Chlorophyll-a **Region 3**

Toro Creek

LOE ID:	13378
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **48834** **Region 3**

Toro Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Two of 7 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 7 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48834, Escherichia coli (E. coli) **Region 3**

Toro Creek

LOE ID:	52488
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36826**	**Region 3**
Toro Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. These beneficial uses are fully supported. The most recent 12 samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). One of the 8 samples exceed the

evaluation guideline however, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Zero of the 19 nitrate samples exceed the water quality objectives for municipal and domestic supply use and 1 of the 8 samples exceed the evaluation guideline for aquatic life uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	52485
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	52456
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	52455

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	52444
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	52445
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	52427
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	52439
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	52484
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	9972
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36826, Nitrate **Region 3**

Toro Creek

LOE ID:	9960
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53511 Region 3

Toro Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 8 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 8 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53511, Nitrogen, Nitrite Region 3

Toro Creek

LOE ID:	52440
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37570**	**Region 3**
Toro Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 16 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 16 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37570, Sodium **Region 3**

Toro Creek

LOE ID:	52442
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37570, Sodium — Region 3

Toro Creek

LOE ID:	9973
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-8/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36807 — Region 3

Toro Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 22 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 22 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36807, Specific Conductivity **Region 3**

Toro Creek

LOE ID:	11854
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36807, Specific Conductivity **Region 3**

Toro Creek

LOE ID:	52426
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37584	Region 3
Toro Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37584, Temperature, water	**Region 3**
Toro Creek	

LOE ID:	52472
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to

	determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37584, Temperature, water **Region 3**

Toro Creek

LOE ID:	13415
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38714 Region 3

Toro Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 21 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 1 of the 21 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 21 samples exceed the evaluation guideline for Cold Freshwater Habitat and 1 of the 21 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38714, Turbidity Region 3

Toro Creek

LOE ID:	13399

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38714, Turbidity **Region 3**

Toro Creek

LOE ID:	13398
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38714, Turbidity **Region 3**

Toro Creek

LOE ID:	52458
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38714, Turbidity **Region 3**

Toro Creek

LOE ID:	52471
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37585** **Region 3**

Toro Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 21 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat, Agricultural Supply, Drinking Water, and Recreation. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat, Agricultural Supply, Drinking Water, and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	52457
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	52486
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	52441
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	52428
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	52430
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	52470
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Toro Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/12/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	11873
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	11870
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	11872
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	11855
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	11871
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37585, pH **Region 3**

Toro Creek

LOE ID:	11874
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Toro Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Toro Creek was collected at 1 monitoring site [310TOR-Toro Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Old Creek (above Whale Rock Reservoir)**
Water Body ID: **CAR3101701220020124121553**
Water Body Type: **River & Stream**

DECISION ID **41293** **Region 3**
Old Creek (above Whale Rock Reservoir)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 13 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 13 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41293, Ammonia **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	9568
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41293, Ammonia **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	9567
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41293, Ammonia **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	9566
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41293, Ammonia **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51137
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41293, Ammonia **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51097

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41293, Ammonia **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51061
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41254 Region 3

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41254, Boron **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	50887
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41254, Boron **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	9569
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-6/3/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41778 Region 3

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 11 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41778, Chloride **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10047
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-6/3/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41778, Chloride **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51040
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41725 Region 3

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13

samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41725, Chlorophyll-a **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51076
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41725, Chlorophyll-a **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51151
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41725, Chlorophyll-a **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	12748
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41725, Chlorophyll-a **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	12747
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41652 **Region 3**

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 5 nitrate samples exceed the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 5 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 5 nitrate/nitrite samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does not satisfy the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 5 nitrate samples exceed the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 5 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 5 nitrate/nitrite samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41652, Nitrate — Region 3

Old Creek (above Whale Rock Reservoir)

LOE ID:	10048
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8

	samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41652, Nitrate **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10061
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41652, Nitrate **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51078
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41652, Nitrate **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51077
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41652, Nitrate **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51114
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41652, Nitrate **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51153
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41652, Nitrate **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51152
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41652, Nitrate **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51115
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41652, Nitrate — Region 3

Old Creek (above Whale Rock Reservoir)

LOE ID:	51042
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41652, Nitrate — Region 3

Old Creek (above Whale Rock Reservoir)

LOE ID:	51043
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 48721 Region 3

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the water quality objective and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48721, Nitrogen, Nitrite **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51058
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41190** **Region 3**

Old Creek (above Whale Rock Reservoir)

Pollutant: **Oxygen, Dissolved**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Zero of the 13 samples exceeded the water quality objectives for dissolved oxygen in Cold and Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 13 samples exceeded the water quality objectives for dissolved oxygen in Cold and Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41190, Oxygen, Dissolved **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51093
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41190, Oxygen, Dissolved **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51169
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41190, Oxygen, Dissolved **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51154
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41190, Oxygen, Dissolved **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51079
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41190, Oxygen, Dissolved **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	12749
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [

	310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41190, Oxygen, Dissolved **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	12750
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41190, Oxygen, Dissolved **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	12480

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41190, Oxygen, Dissolved **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	12479
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41346 Region 3

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41346, Sodium **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10062
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-6/3/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41346, Sodium **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51060
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41328 Region 3

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41328, Specific Conductivity **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51041
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41328, Specific Conductivity **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10955
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41320 **Region 3**

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 13 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41320, Temperature, water **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	12497
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41320, Temperature, water **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51096
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41321 **Region 3**

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 13 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and One of the 13 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 13 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41321, Turbidity **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51171
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41321, Turbidity **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51095
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

Line of Evidence (LOE) for Decision ID 41321, Turbidity **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	12482
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41321, Turbidity **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	12483
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41334 Region 3

Old Creek (above Whale Rock Reservoir)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 13 samples exceed the water quality objectives for Agriculture, Cold and Warm Freshwater Habitats and for Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10973
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10974
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10975
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10976
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]

Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10972
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10956
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51059
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51116
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51170
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51094
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51135
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41334, pH **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51133
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47350 **Region 3**

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Five of 5 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 5 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47350, Escherichia coli (E. coli) **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51118
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41191 Region 3

Old Creek (above Whale Rock Reservoir)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Fecal Coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Five of 13 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 1 of 13 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 13 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41191, Fecal Coliform Region 3

Old Creek (above Whale Rock Reservoir)

LOE ID:	51134
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41191, Fecal Coliform **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	51117
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Old Creek(above res) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41191, Fecal Coliform **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10953
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41191, Fecal Coliform **Region 3**

Old Creek (above Whale Rock Reservoir)

LOE ID:	10954
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Old Creek(above res) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Creek(above res) was collected at 1 monitoring site [310OLD-Old Creek at Cottontail Creek Road]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Cayucos Creek**
Water Body ID: **CAR3101601019990225090814**
Water Body Type: **River & Stream**

DECISION ID **38348** **Region 3**
Cayucos Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11978) and total ammonia (Decision 11980). This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 9 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 10 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 9 samples exceed the Basin Plan general objective for unionized ammonia and zero of the 10 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38348, Ammonia **Region 3**

Cayucos Creek

LOE ID:	9950
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38348, Ammonia **Region 3**

Cayucos Creek

LOE ID:	9951
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38348, Ammonia **Region 3**

Cayucos Creek

LOE ID:	9952
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]

Temporal Representation: Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38348, Ammonia **Region 3**

Cayucos Creek

LOE ID: 50159

Pollutant: Ammonia (Unionized)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference: Santa Lucia Watershed Rotation field data 2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]

Temporal Representation: Data was collected on a single day 10/14/2009.

Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38348, Ammonia **Region 3**

Cayucos Creek

LOE ID: 50239

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38348, Ammonia **Region 3**

Cayucos Creek

LOE ID:	50198
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47159** **Region 3**

Cayucos Creek

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample showed an IBI score below 39, which indicates poor water quality for this area. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 47159, Benthic Community Effects **Region 3**

Cayucos Creek

LOE ID:	53964
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was 39 or lower and therefore is below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310CAYxxx-Cayucos Creek @ Cayucos Creek Rd
Temporal Representation:	Surveys done on May 20, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

DECISION ID **38038** **Region 3**

Cayucos Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 8 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial

uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 8 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38038, Boron **Region 3**

Cayucos Creek

LOE ID:	50121
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38038, Boron **Region 3**

Cayucos Creek

LOE ID:	9964
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-7/1/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37847** **Region 3**

Cayucos Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 8 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 8 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37847, Chloride **Region 3**

Cayucos Creek

LOE ID:	9965
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride

	exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-7/1/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37847, Chloride **Region 3**

Cayucos Creek

LOE ID:	50122
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	41985	Region 3
Cayucos Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 10 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 10 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41985, Chlorophyll-a	**Region 3**
Cayucos Creek	

LOE ID:	50240
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41985, Chlorophyll-a **Region 3**

Cayucos Creek

LOE ID:	50160
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41985, Chlorophyll-a **Region 3**

Cayucos Creek

LOE ID:	12640
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41985, Chlorophyll-a **Region 3**

Cayucos Creek

LOE ID:	12598
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47160**	**Region 3**
Cayucos Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. The single sample did the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47160, Escherichia coli (E. coli) **Region 3**

Cayucos Creek

LOE ID:	50220
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38189** **Region 3**

Cayucos Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 10 samples exceed the water quality objectives for recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial

uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 10 samples exceed the water quality objectives for recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38189, Fecal Coliform **Region 3**

Cayucos Creek

LOE ID:	50222
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38189, Fecal Coliform **Region 3**

Cayucos Creek

LOE ID:	50219
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38189, Fecal Coliform **Region 3**

Cayucos Creek

LOE ID:	10848
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38189, Fecal Coliform **Region 3**

Cayucos Creek

LOE ID:	10847
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38040**	**Region 3**
Cayucos Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 10 nitrate samples exceed the water quality objectives for the Agricultural Supply or Municipal and Domestic Supply beneficial uses. Zero of 1 nitrate samples exceed the water quality objective for Cold and Warm Freshwater Habitat. Zero of the 1 nitrate/nitrite samples exceed the water quality objectives for Agricultural Supply or Municipal and Domestic Supply. Zero of 1 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat. Based on the readily available data and information, there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. Zero of the 10 nitrate samples exceed the water quality objectives for the Agricultural Supply or Municipal and Domestic Supply beneficial uses. Zero of 1 nitrate samples exceed the water quality objective for Cold and Warm Freshwater Habitat. Zero of the 1 nitrate/nitrite samples exceed the water quality objectives for Agricultural Supply or Municipal and Domestic Supply. Zero of 1 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 2. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38040, Nitrate — Region 3

Cayucos Creek

LOE ID:	9966
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38040, Nitrate — Region 3

Cayucos Creek

LOE ID:	9967
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38040, Nitrate **Region 3**

Cayucos Creek

LOE ID:	50140
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38040, Nitrate **Region 3**

Cayucos Creek

LOE ID:	50177
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38040, Nitrate **Region 3**

Cayucos Creek

LOE ID:	50201
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38040, Nitrate **Region 3**

Cayucos Creek

LOE ID:	50161
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38040, Nitrate **Region 3**

Cayucos Creek

LOE ID:	50242
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38040, Nitrate **Region 3**

Cayucos Creek

LOE ID:	50139
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38040, Nitrate **Region 3**

Cayucos Creek

LOE ID:	50200
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38040, Nitrate — Region 3

Cayucos Creek

LOE ID:	50241
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53540 — Region 3

Cayucos Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53540, Nitrogen, Nitrite **Region 3**

Cayucos Creek

LOE ID:	50141
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37759**	**Region 3**
Cayucos Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One of 10 samples exceeded the Cold and Warm Freshwater Habitat water quality objectives for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 10 samples exceeded the Cold and Warm Freshwater Habitat water quality objectives for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37759, Oxygen, Dissolved — Region 3

Cayucos Creek

LOE ID:	50178
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37759, Oxygen, Dissolved — Region 3

Cayucos Creek

LOE ID:	50179
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the

	criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37759, Oxygen, Dissolved **Region 3**

Cayucos Creek

LOE ID:	50255
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37759, Oxygen, Dissolved **Region 3**

Cayucos Creek

LOE ID:	50256
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37759, Oxygen, Dissolved **Region 3**

Cayucos Creek

LOE ID:	12642
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37759, Oxygen, Dissolved **Region 3**

Cayucos Creek

LOE ID:	12641
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37759, Oxygen, Dissolved **Region 3**

Cayucos Creek

LOE ID:	12658
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37759, Oxygen, Dissolved **Region 3**

Cayucos Creek

LOE ID:	12657
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38287** **Region 3**

Cayucos Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 8 samples exceed the water quality objective for agricultural uses.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 8 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38287, Sodium **Region 3**

Cayucos Creek

LOE ID:	9980
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [

	310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-7/1/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38287, Sodium **Region 3**

Cayucos Creek

LOE ID:	50158
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38203** **Region 3**

Cayucos Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. [NUMBER] of [NUMBER] samples exceeded the [OBJECTIVE/GUIDELINE/CRITERIA] and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38203, Specific Conductivity **Region 3**

Cayucos Creek

LOE ID:	50123
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38203, Specific Conductivity **Region 3**

Cayucos Creek

LOE ID:	10861
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37922** **Region 3**

Cayucos Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 10 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 10 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37922, Temperature, water **Region 3**

Cayucos Creek

LOE ID:	12676
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37922, Temperature, water **Region 3**

Cayucos Creek

LOE ID:	50197
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38071** **Region 3**

Cayucos Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 10 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984) and 2 of the 10 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 10 samples exceed the evaluation guidelines but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38071, Turbidity **Region 3**

Cayucos Creek

LOE ID:	50181
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38071, Turbidity **Region 3**

Cayucos Creek

LOE ID:	50258
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38071, Turbidity **Region 3**

Cayucos Creek

LOE ID:	12661
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38071, Turbidity **Region 3**

Cayucos Creek

LOE ID:	12660
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38576** **Region 3**

Cayucos Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Two of the 10 samples exceed the water quality objective for Agricultural supply, 3 of the 10 samples exceeded the water quality objectives for Drinking Water and Recreation and 1 of the 10 samples exceed the water quality objective for Cold Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 10 samples exceed the water quality objective for Agricultural supply, 3 of the 10 samples exceeded the water quality objectives for Drinking Water and Recreation and 1 of the 10 samples exceed the water quality objective for Cold Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38576, pH **Region 3**

Cayucos Creek

LOE ID:	10881
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38576, pH **Region 3**

Cayucos Creek

LOE ID:	10865
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38576, pH — Region 3

Cayucos Creek

LOE ID:	10864
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38576, pH — Region 3

Cayucos Creek

LOE ID:	10882
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38576, pH **Region 3**

Cayucos Creek

LOE ID:	10862
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38576, pH **Region 3**

Cayucos Creek

LOE ID:	10863
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38576, pH — Region 3

Cayucos Creek

LOE ID:	50142
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38576, pH — Region 3

Cayucos Creek

LOE ID:	50223
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38576, pH **Region 3**

Cayucos Creek

LOE ID:	50202
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38576, pH **Region 3**

Cayucos Creek

LOE ID:	50257
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38576, pH **Region 3**

Cayucos Creek

LOE ID:	50180
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38576, pH **Region 3**

Cayucos Creek

LOE ID:	50221
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Cayucos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Cayucos Creek was collected at 1 monitoring site [310CAY-Cayucos Creek at Cayucos Creek Road and Highway 1]
Temporal Representation:	Data was collected on a single day 10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Villa Creek**
Water Body ID: **CAR3101501020020124152719**
Water Body Type: **River & Stream**

DECISION ID **37351** **Region 3**
Villa Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 10 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 11 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 10 samples exceed the water quality objective for unionized ammonia and zero of the 11 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37351, Ammonia **Region 3**
Villa Creek

LOE ID:	10008
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37351, Ammonia **Region 3**

Villa Creek

LOE ID:	10021
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Villa Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37351, Ammonia **Region 3**

Villa Creek

LOE ID:	52660
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37351, Ammonia **Region 3**

Villa Creek

LOE ID:	52796
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37602** **Region 3**

Villa Creek

Pollutant: **Boron**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 8 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 8 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37602, Boron **Region 3**

Villa Creek

LOE ID:	52767
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37602, Boron **Region 3**

Villa Creek

LOE ID:	10022
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-5/6/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36926	Region 3
Villa Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 8 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 8 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36926, Chloride	**Region 3**
Villa Creek	

LOE ID:	10023
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Villa Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-5/6/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36926, Chloride **Region 3**

Villa Creek

LOE ID:	52768
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38951**	**Region 3**
Villa Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 11 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 11 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38951, Chlorophyll-a	**Region 3**
Villa Creek	

LOE ID:	52797
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38951, Chlorophyll-a **Region 3**

Villa Creek

LOE ID:	13510
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48835**	**Region 3**
Villa Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. . A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Two of 3 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 3 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48835, Escherichia coli (E. coli) **Region 3**

Villa Creek

LOE ID:	52680
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37616** **Region 3**

Villa Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. The most recent 3 samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). One of the 3 samples exceed the evaluation guideline however, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Zero of the 11 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. One of the 3 samples exceed the evaluation guideline for aquatic life uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37616, Nitrate **Region 3**

Villa Creek

LOE ID:	52677
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37616, Nitrate **Region 3**

Villa Creek

LOE ID:	52676
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37616, Nitrate **Region 3**

Villa Creek

LOE ID:	52798
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37616, Nitrate **Region 3**

Villa Creek

LOE ID:	52799
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37616, Nitrate **Region 3**

Villa Creek

LOE ID:	52781
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37616, Nitrate **Region 3**

Villa Creek

LOE ID:	52770
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37616, Nitrate **Region 3**

Villa Creek

LOE ID:	10037
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37616, Nitrate **Region 3**

Villa Creek

LOE ID:	10024
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	53516	Region 3
Villa Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53516, Nitrogen, Nitrite	**Region 3**
Villa Creek	

LOE ID:	52782
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37617**	**Region 3**
Villa Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37617, Oxygen, Dissolved **Region 3**

Villa Creek

LOE ID:	52655
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37617, Oxygen, Dissolved **Region 3**

Villa Creek

LOE ID:	52656
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37617, Oxygen, Dissolved **Region 3**

Villa Creek

LOE ID:	13511
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37617, Oxygen, Dissolved **Region 3**

Villa Creek

LOE ID:	13512
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	37134	Region 3
Villa Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 8 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 8 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37134, Sodium	**Region 3**
Villa Creek	

LOE ID:	10038
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-5/6/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37134, Sodium **Region 3**

Villa Creek

LOE ID:	52784
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37613** **Region 3**

Villa Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37613, Specific Conductivity **Region 3**

Villa Creek

LOE ID:	52769

Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37613, Specific Conductivity **Region 3**

Villa Creek

LOE ID:	11689
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36204**	**Region 3**
Villa Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36204, Temperature, water **Region 3**

Villa Creek

LOE ID:	13528
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36204, Temperature, water **Region 3**

Villa Creek

LOE ID:	52659
Pollutant:	Temperature, water

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**39015**	**Region 3**
Villa Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 11 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 11 samples exceed the evaluation guideline for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39015, Turbidity **Region 3**

Villa Creek

LOE ID:	52658
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39015, Turbidity **Region 3**

Villa Creek

LOE ID:	13527
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37344**	**Region 3**
Villa Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial

uses are assessed. Zero of the 11 samples exceed the water quality objective for Cold Freshwater Habitat, 2 of the 11 samples exceed the water quality objective for Agricultural Supply, and 3 of the 11 samples exceed the water quality objectives for Drinking Water and Recreation. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 11 samples exceed the water quality objective for Cold Freshwater Habitat, 2 of the 11 samples exceed the water quality objective for Agricultural Supply, and 3 of the 11 samples exceed the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	11706
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	11707
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	11708

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	11709
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	11690
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]

Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	52657
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	52678
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	52783
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	52698
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37344, pH **Region 3**

Villa Creek

LOE ID:	52696

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37615**	**Region 3**
Villa Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Six of 11 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming,

wading etc.) and 2 of 11 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 11 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37615, Fecal Coliform **Region 3**

Villa Creek

LOE ID:	11688
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37615, Fecal Coliform **Region 3**

Villa Creek

LOE ID:	11687
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Villa Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2002-3/4/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37615, Fecal Coliform **Region 3**

Villa Creek

LOE ID:	52679
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37615, Fecal Coliform **Region 3**

Villa Creek

LOE ID:	52697
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Villa Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Villa Creek was collected at 1 monitoring site [310VIA-Villa Creek u/s Highway 1]
Temporal Representation:	Data was collected over the time period 3/12/2009-10/14/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Little Pico Creek**
Water Body ID: **CAR3101302119990304135342**
Water Body Type: **River & Stream**

DECISION ID **40977** **Region 3**
Little Pico Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the water quality objective for Non-Contact Recreation. Both of the 2 samples exceed the water quality objective for Water Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the water quality objective for Non-Contact Recreation. Both of the 2 samples exceed the water quality objective for Water Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40977, Escherichia coli (E. coli) **Region 3**
Little Pico Creek

LOE ID: 18440

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 2
Number of Exceedances: 2

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40977, Escherichia coli (E. coli) **Region 3**

Little Pico Creek

LOE ID:	18441
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]

Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41062 Region 3

Little Pico Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41062, Nitrate Region 3

Little Pico Creek

LOE ID:	18544
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41062, Nitrate **Region 3**

Little Pico Creek

LOE ID:	18543
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42116 Region 3

Little Pico Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the two samples exceed the water quality objective for Aquatic Life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the water quality objective and this does not exceed the allowable frequency in table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42116, Oxygen, Dissolved Region 3

Little Pico Creek

LOE ID:	18080
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**42245**	**Region 3**
Little Pico Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision to specific conductivity. One line of evidence is available in the administrative record to assess this pollutant. Neither of the samples exceed the water quality objective for Agricultural Supply. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a

minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the samples exceed the water quality objective for Agricultural Supply. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42245, Specific Conductivity **Region 3**

Little Pico Creek

LOE ID:	17663
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42246 Region 3

Little Pico Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the samples exceed the water quality objective for Cold Freshwater Habitat. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the water quality objective for Cold Freshwater Habitat. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42246, Temperature, water Region 3

Little Pico Creek

LOE ID:	18708
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42044 Region 3

Little Pico Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Neither of the samples exceed the water quality objectives for Agricultural Supply, Cold Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation or Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the samples exceed the water quality objective for Cold Freshwater Habitat. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42044, pH Region 3

Little Pico Creek

LOE ID:	19121

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42044, pH **Region 3**

Little Pico Creek

LOE ID:	19119
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and

	Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42044, pH **Region 3**

Little Pico Creek

LOE ID:	19118
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42044, pH **Region 3**

Little Pico Creek

LOE ID:	19117
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42044, pH **Region 3**

Little Pico Creek

LOE ID:	19120
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Pico Creek was collected at 1 monitoring site [310-LITTLE-41 - Little Pico Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pico Creek**
Water Body ID: **CAR3101302020020124125005**
Water Body Type: **River & Stream**

DECISION ID **41218** **Region 3**
Pico Creek

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Five of the 21 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. However, 0 of the 21 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating for Warm Freshwater Habitats is set to 'insufficient information'

The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 21 samples exceeded the water quality objective for Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	12500
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	12534
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pico Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/29/2002-8/30/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	12535
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pico Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/29/2002-8/30/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	12501
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	12533

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/29/2002-8/30/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	12520
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pico Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/29/2002-8/30/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	12498
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	12499
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	50952
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	50953
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	50978
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41218, Oxygen, Dissolved **Region 3**

Pico Creek

LOE ID:	50977

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41257**	**Region 3**
Pico Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 17 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 19 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41257, Ammonia **Region 3**

Pico Creek

LOE ID:	10077
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41257, Ammonia **Region 3**

Pico Creek

LOE ID:	10064
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41257, Ammonia **Region 3**

Pico Creek

LOE ID:	10063
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41257, Ammonia **Region 3**

Pico Creek

LOE ID:	50991
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of

	the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41257, Ammonia **Region 3**

Pico Creek

LOE ID:	51020
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41257, Ammonia **Region 3**

Pico Creek

LOE ID:	50964
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41214** **Region 3**

Pico Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a

minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41214, Boron **Region 3**

Pico Creek

LOE ID:	50946
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41214, Boron **Region 3**

Pico Creek

LOE ID:	10078
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-7/18/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41215** **Region 3**

Pico Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41215, Chloride **Region 3**

Pico Creek

LOE ID:	10079
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride

	exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-7/18/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41215, Chloride **Region 3**

Pico Creek

LOE ID:	50947
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	41166	Region 3
Pico Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 19 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 19 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41166, Chlorophyll-a	**Region 3**
Pico Creek	

LOE ID:	51021
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to

	determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41166, Chlorophyll-a **Region 3**

Pico Creek

LOE ID:	50974
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41166, Chlorophyll-a **Region 3**

Pico Creek

LOE ID:	10095
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41166, Chlorophyll-a **Region 3**

Pico Creek

LOE ID:	10096
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47354**	**Region 3**
Pico Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for the water contact recreation for Escherichia coli (E.coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. One of 5 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 5 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47354, Escherichia coli (E. coli)	**Region 3**

Pico Creek

LOE ID:	51005
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41304** **Region 3**

Pico Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. One of 19

samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading, etc.) and 1 of 19 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 19 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 19 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41304, Fecal Coliform **Region 3**

Pico Creek

LOE ID:	51004
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41304, Fecal Coliform **Region 3**

Pico Creek

LOE ID:	51007
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41304, Fecal Coliform **Region 3**

Pico Creek

LOE ID:	10697
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41304, Fecal Coliform **Region 3**

Pico Creek

LOE ID:	10696
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41305**	**Region 3**
Pico Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial uses. Zero of 5 nitrate samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial uses. Zero of 5 nitrate samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41305, Nitrate — Region 3

Pico Creek

LOE ID:	10093
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41305, Nitrate — Region 3

Pico Creek

LOE ID:	10080
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41305, Nitrate **Region 3**

Pico Creek

LOE ID:	50951
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41305, Nitrate **Region 3**

Pico Creek

LOE ID:	50976
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41305, Nitrate **Region 3**

Pico Creek

LOE ID:	50975
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41305, Nitrate **Region 3**

Pico Creek

LOE ID:	51002
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41305, Nitrate **Region 3**

Pico Creek

LOE ID:	50993
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41305, Nitrate **Region 3**

Pico Creek

LOE ID:	50949
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41305, Nitrate **Region 3**

Pico Creek

LOE ID:	50950
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41305, Nitrate **Region 3**

Pico Creek

LOE ID:	51022
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**52200**	**Region 3**
Pico Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the five samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52200, Nitrogen, Nitrite **Region 3**

Pico Creek

LOE ID:	50961
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41339 Region 3

Pico Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 12 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41339, Sodium Region 3

Pico Creek

LOE ID:	50963
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41339, Sodium **Region 3**

Pico Creek

LOE ID:	10094
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-7/18/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41258**	**Region 3**
Pico Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 20 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 20 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41258, Specific Conductivity **Region 3**

Pico Creek

LOE ID:	10698
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41258, Specific Conductivity **Region 3**

Pico Creek

LOE ID:	50948

Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41274**	**Region 3**
Pico Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 21 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if

beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 21 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41274, Temperature, water **Region 3**

Pico Creek

LOE ID:	50990
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41274, Temperature, water **Region 3**

Pico Creek

LOE ID:	12519
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41274, Temperature, water **Region 3**

Pico Creek

LOE ID:	12536
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/29/2002-8/30/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41208	Region 3
Pico Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. [NUMBER] lines of evidence are available in the administrative record to assess this pollutant. One of the 19 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and one of the 19 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 19 samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41208, Turbidity **Region 3**

Pico Creek

LOE ID:	12518
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41208, Turbidity **Region 3**

Pico Creek

LOE ID:	12517
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41208, Turbidity **Region 3**

Pico Creek

LOE ID:	50989
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41208, Turbidity **Region 3**

Pico Creek

LOE ID:	50955
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass

Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41306 Region 3

Pico Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of 19 samples exceed the water quality objectives for Agricultural Supply, and one of 19 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat, Drinking Water and Recreation.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 19 samples exceed the water quality objectives for Agricultural Supply, and one of 19 samples exceed the water quality objectives for Cold Freshwater Habitat, Warm Freshwater Habitat, Drinking Water, and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41306, pH Region 3

Pico Creek

LOE ID:	51003

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41306, pH **Region 3**

Pico Creek

LOE ID:	51018
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41306, pH **Region 3**

Pico Creek

LOE ID:	50988
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41306, pH **Region 3**

Pico Creek

LOE ID:	50954

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41306, pH **Region 3**

Pico Creek

LOE ID:	50962
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41306, pH **Region 3**

Pico Creek

LOE ID:	51006
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41306, pH — Region 3

Pico Creek

LOE ID:	10714
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41306, pH — Region 3

Pico Creek

LOE ID:	10699
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41306, pH **Region 3**

Pico Creek

LOE ID:	10716
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor

raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]

Temporal Representation: Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41306, pH **Region 3**

Pico Creek

LOE ID: 10718

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 14
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]

Temporal Representation: Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41306, pH — Region 3

Pico Creek

LOE ID:	10717
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41306, pH — Region 3

Pico Creek

LOE ID:	10715
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Pico Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pico Creek was collected at 1 monitoring site [310PCO-Pico Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Simeon Creek**
Water Body ID: **CAR3101301220020124141805**
Water Body Type: **River & Stream**

DECISION ID **44452** **Region 3**
San Simeon Creek

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Forty-one of the 95 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-one of the 95 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44452, Chloride **Region 3**
San Simeon Creek

LOE ID: 9879

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	46
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 22 of 46 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44452, Chloride **Region 3**

San Simeon Creek

LOE ID:	9924
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-5/14/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44452, Chloride **Region 3**

San Simeon Creek

LOE ID:	52055
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 19 of 37 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44452, Chloride **Region 3**

San Simeon Creek

LOE ID:	52056
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38313** **Region 3**

San Simeon Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twenty lines of evidence are available in the administrative record to assess this pollutant. Zero of the 111 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. This use is fully supported. Twenty-six of the 111 nitrate samples and 19 of the 45 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Thirty-two of the 45 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat and the following is a summary of the supporting evidence for presence of and risk for eutrophic conditions in this water segment:
1) Dissolved oxygen for this water body ranged from 1.46 mg/L to 29.28 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Visual observations of floating algal mats ranged up to 90% cover, rarely exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration ranged up to 46.5 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 2.75 mg/L at the most downstream at the head of the lagoon. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at the most downstream site of 64 g/m2 ash-free dry weight (AFDW). This exceed the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2, but not the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations at the most downstream sites of 161 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2, but not the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-two of the 45 nitrate samples and 19 of the 45 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Thirty-two of the 45 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat and there is sufficient supporting evidence of eutrophication indicating an impact to the Cold and Warm Freshwater Habitat uses.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51773
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51788
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51787
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 32 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51774
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51789
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 32 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51790
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51828
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51829
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek

	to determine beneficial use support and results are as follows: 32 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51830
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51827
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 32 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory

	Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51808
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51805

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 19 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51806
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	51807
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 19 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	9893
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	53
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 7 of 53 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	18340
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	9880
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate

	exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	9925
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	9926
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38313, Nitrate **Region 3**

San Simeon Creek

LOE ID:	18341
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37866**	**Region 3**
San Simeon Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-two lines of evidence are available in the administrative record to assess this pollutant. Thirty-five of the 121 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. Seventeen of the 121 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm

Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-five of the 121 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13574
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 12 of 52 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13613
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 9 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13614
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	10
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 9 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13575
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 4 of 52 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen

	concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13576
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 14 of 52 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved — Region 3

San Simeon Creek

LOE ID:	13577
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 14 of 52 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved — Region 3

San Simeon Creek

LOE ID:	13596
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10

Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13597
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 7 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	18113
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	18114

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13343
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13344
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13345
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	13346
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	51843
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality

	conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	51791
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 15 of 39 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	51794
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	51793
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 24 of 39 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	51792
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved — Region 3

San Simeon Creek

LOE ID:	51832
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved — Region 3

San Simeon Creek

LOE ID:	51831
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 6 of 39 samples exceed the

	criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37866, Oxygen, Dissolved **Region 3**

San Simeon Creek

LOE ID:	51842
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 24 of 39 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37869** **Region 3**

San Simeon Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Forty-five of the 95 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-five of the 95 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37869, Sodium **Region 3**

San Simeon Creek

LOE ID:	51782
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Sodium.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37869, Sodium **Region 3**

San Simeon Creek

LOE ID:	51781
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 21 of 37 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37869, Sodium **Region 3**

San Simeon Creek

LOE ID:	9894
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	46
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 24 of 46 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37869, Sodium **Region 3**

San Simeon Creek

LOE ID:	9927
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-5/14/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38639** **Region 3**

San Simeon Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which zero of the 99 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 107 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 99 samples exceed the water quality objective for unionized ammonia and zero of the 107 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	51802
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	51824
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	51823

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	51801
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	51783
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	51784
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	9863
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	9909
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries)

	states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	9910
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	9908
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	9877
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 50 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38639, Ammonia **Region 3**

San Simeon Creek

LOE ID:	9864
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 50 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia

	(NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 52527 Region 3

San Simeon Creek

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the two samples indicate that this water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the SoCal IBI. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 52527, Benthic Community Effects Region 3

San Simeon Creek

LOE ID:	57922
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores in this water body were above 39 and therefore not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310SSUxxx-San Simeon Creek at San Simeon Creek Road
Temporal Representation:	Surveys done on April 22, 2009 and May 20, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

DECISION ID	38398	Region 3
San Simeon Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 95 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 95 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38398, Boron **Region 3**

San Simeon Creek

LOE ID:	9878
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 46 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38398, Boron **Region 3**

San Simeon Creek

LOE ID:	9911
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-5/14/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38398, Boron **Region 3**

San Simeon Creek

LOE ID:	52054
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38398, Boron **Region 3**

San Simeon Creek

LOE ID:	52053
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38682 Region 3

San Simeon Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Two of the 106 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 106 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38682, Chlorophyll-a Region 3

San Simeon Creek

LOE ID:	9941
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9

	samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38682, Chlorophyll-a **Region 3**

San Simeon Creek

LOE ID:	9942
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38682, Chlorophyll-a **Region 3**

San Simeon Creek

LOE ID:	9895
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38682, Chlorophyll-a **Region 3**

San Simeon Creek

LOE ID:	9896
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38682, Chlorophyll-a **Region 3**

San Simeon Creek

LOE ID:	51785
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38682, Chlorophyll-a **Region 3**

San Simeon Creek

LOE ID:	51786
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38682, Chlorophyll-a **Region 3**

San Simeon Creek

LOE ID:	51826
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38682, Chlorophyll-a **Region 3**

San Simeon Creek

LOE ID:	51825
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41887**	**Region 3**
San Simeon Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. No water samples are included in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. One sediment sample (pore water) exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). The other pore water sample will not be used in this decision because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and pore water samples will not be the sole basis for any decision. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41887, Chlorpyrifos **Region 3**

San Simeon Creek

LOE ID:	16020
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 1

	of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41887, Chlorpyrifos **Region 3**

San Simeon Creek

LOE ID:	16021
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41887, Chlorpyrifos **Region 3**

San Simeon Creek

LOE ID:	16246
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41887, Chlorpyrifos **Region 3**

San Simeon Creek

LOE ID:	16247
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41887, Chlorpyrifos **Region 3**

San Simeon Creek

LOE ID:	47710

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [San Simeon Creek at State Park foot bridge - 310SSCxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41887, Chlorpyrifos **Region 3**

San Simeon Creek

LOE ID:	47725
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [San Simeon Creek at State Park foot bridge - 310SSCxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**42622**	**Region 3**
San Simeon Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Six lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of two sediment samples (pore water) exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single water sample does not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42622, Diazinon **Region 3**

San Simeon Creek

LOE ID:	16633
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42622, Diazinon **Region 3**

San Simeon Creek

LOE ID:	47653
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [San Simeon Creek at State Park foot bridge - 310SSCxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42622, Diazinon **Region 3**

San Simeon Creek

LOE ID:	16660
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42622, Diazinon **Region 3**

San Simeon Creek

LOE ID:	16620
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42622, Diazinon **Region 3**

San Simeon Creek

LOE ID:	16718
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42622, Diazinon **Region 3**

San Simeon Creek

LOE ID:	47668
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [San Simeon Creek at State Park foot bridge - 310SSCxxx]
Temporal Representation:	Data was collected on a single day 5/13/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **37791** **Region 3**

San Simeon Creek

Pollutant: **Escherichia coli (E. coli)**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Eight of 72 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 27 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of 72 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 27 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37791, Escherichia coli (E. coli) **Region 3**

San Simeon Creek

LOE ID:	11798
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of

	2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37791, Escherichia coli (E. coli) **Region 3**

San Simeon Creek

LOE ID:	11797
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 1/10/2005-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37791, Escherichia coli (E. coli) **Region 3**

San Simeon Creek

LOE ID:	18473
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37791, Escherichia coli (E. coli) **Region 3**

San Simeon Creek

LOE ID:	18472
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37791, Escherichia coli (E. coli) **Region 3**

San Simeon Creek

LOE ID:	51813
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37791, Escherichia coli (E. coli) — Region 3

San Simeon Creek

LOE ID:	51814
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37748 — Region 3

San Simeon Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Nine of 108 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 4 of 108 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 108 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 4 of 108 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	51818
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	51812
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	51811
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38

Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	51817
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 2 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	11814
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	11739
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	53
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 3 of 53 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	11740
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	53
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 53 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	11815
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	17401
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37748, Fecal Coliform **Region 3**

San Simeon Creek

LOE ID:	17402
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **52960** **Region 3**

San Simeon Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 45 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 45 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52960, Nitrogen, Nitrite **Region 3**

San Simeon Creek

LOE ID:	51778
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52960, Nitrogen, Nitrite **Region 3**

San Simeon Creek

LOE ID:	51777
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37790** **Region 3**

San Simeon Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Six lines of evidence are available in the administrative record to assess this pollutant. Two of the 119 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 119 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37790, Specific Conductivity **Region 3**

San Simeon Creek

LOE ID:	11816
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37790, Specific Conductivity **Region 3**

San Simeon Creek

LOE ID:	11776
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37790, Specific Conductivity — Region 3

San Simeon Creek

LOE ID:	11741
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 52 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37790, Specific Conductivity — Region 3

San Simeon Creek

LOE ID:	17571
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37790, Specific Conductivity **Region 3**

San Simeon Creek

LOE ID:	51771
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37790, Specific Conductivity **Region 3**

San Simeon Creek

LOE ID:	51772
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	37656	Region 3
San Simeon Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One of the 121 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 121 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37656, Temperature, water	**Region 3**
San Simeon Creek	

LOE ID:	51800
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37656, Temperature, water **Region 3**

San Simeon Creek

LOE ID:	51799
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37656, Temperature, water **Region 3**

San Simeon Creek

LOE ID:	13364
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37656, Temperature, water **Region 3**

San Simeon Creek

LOE ID:	13342
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37656, Temperature, water **Region 3**

San Simeon Creek

LOE ID:	18818
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37656, Temperature, water **Region 3**

San Simeon Creek

LOE ID:	13595
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 52 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38760	Region 3
San Simeon Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Four LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in sediment samples. Zero of the two sediment samples resulted in a significant toxic effect to one or more test organisms. Six LOEs summarize water samples. One water sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess toxic effects in water samples. One of the three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two sediment samples and one of the three water samples resulted in a significant toxic effect to one or more test organisms. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38760, Toxicity — Region 3

San Simeon Creek

LOE ID:	24318
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38760, Toxicity — Region 3

San Simeon Creek

LOE ID:	24328
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38760, Toxicity **Region 3**

San Simeon Creek

LOE ID:	24308
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38760, Toxicity **Region 3**

San Simeon Creek

LOE ID:	24309
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38760, Toxicity **Region 3**

San Simeon Creek

LOE ID:	24335
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38760, Toxicity **Region 3**

San Simeon Creek

LOE ID:	24319
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [

	310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38760, Toxicity **Region 3**

San Simeon Creek

LOE ID:	57924
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Ceriodaphnia dubia young/female. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SSC - San Simeon Creek at State Park foot bridge.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38760, Toxicity **Region 3**

San Simeon Creek

LOE ID:	57923
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SSC - San Simeon Creek at State Park foot bridge.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38760, Toxicity **Region 3**

San Simeon Creek

LOE ID:	80343
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Ceriodaphnia dubia young/female. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SSC - San Simeon Creek at State Park foot bridge.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38760, Toxicity **Region 3**

San Simeon Creek

LOE ID:	80342
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 310SSC - San Simeon Creek at State Park foot bridge.
Temporal Representation:	The samples were collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID 37657 Region 3

San Simeon Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Ten of the 101 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 8 of the 101 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 101 samples exceed the evaluation guideline for Cold Freshwater Habitat and 8 of the 101 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37657, Turbidity Region 3

San Simeon Creek

LOE ID:	51846

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37657, Turbidity **Region 3**

San Simeon Creek

LOE ID:	51847
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37657, Turbidity **Region 3**

San Simeon Creek

LOE ID:	51798
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37657, Turbidity **Region 3**

San Simeon Creek

LOE ID:	51797
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 4 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37657, Turbidity **Region 3**

San Simeon Creek

LOE ID:	13362
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37657, Turbidity **Region 3**

San Simeon Creek

LOE ID:	13617
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/1/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37657, Turbidity **Region 3**

San Simeon Creek

LOE ID:	13593
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 4 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37657, Turbidity — Region 3

San Simeon Creek

LOE ID:	13363
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37657, Turbidity — Region 3

San Simeon Creek

LOE ID:	13594
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	45
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 4 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37657, Turbidity **Region 3**

San Simeon Creek

LOE ID:	13616
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/1/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37707 Region 3

San Simeon Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty-six lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Four of the 116 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 2 of the 116 samples exceed the water quality objective for Agricultural Supply, and 3 of the 116 samples exceeded the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 116 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, 2 of the 116 samples exceed the water quality objective for Agricultural Supply, and 3 of the 116 samples exceeded the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37707, pH Region 3

San Simeon Creek

LOE ID:	11778
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11835
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	18088
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	18072
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	18071
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11796
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11795
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11794
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11777
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11775
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11759
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11837
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11836
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11834
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11833
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11758
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	18070
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is

	greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11756
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11755
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11817
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11779
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	18090
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	18089

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310-SANSI-41 - San Simeon Creek at campground bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	11757
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 4/24/2001-11/15/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51816
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51810
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51820
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51796
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51795
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51844
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51815
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51809
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51819
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51779
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected over the time period 2/21/2007-6/22/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51780
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37707, pH **Region 3**

San Simeon Creek

LOE ID:	51845
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSU-San Simeon Creek at San Simeon Road]
Temporal Representation:	Data was collected over the time period 2/11/2009-12/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42442**	**Region 3**
San Simeon Creek		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42442, Anthracene **Region 3**

San Simeon Creek

LOE ID:	15801
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42442, Anthracene **Region 3**

San Simeon Creek

LOE ID:	15800
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38310**	**Region 3**
San Simeon Creek		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence

of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38310, Arsenic **Region 3**

San Simeon Creek

LOE ID:	15611
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38310, Arsenic **Region 3**

San Simeon Creek

LOE ID:	15598

Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42601** **Region 3**

San Simeon Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42601, Benzo(a)anthracene **Region 3**

San Simeon Creek

LOE ID:	15480
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42601, Benzo(a)anthracene **Region 3**

San Simeon Creek

LOE ID:	15479
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42482** **Region 3**

San Simeon Creek

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42482, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

San Simeon Creek

LOE ID:	15564
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42482, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

San Simeon Creek

LOE ID:	15565
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38258** **Region 3**

San Simeon Creek

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38258, Cadmium **Region 3**

San Simeon Creek

LOE ID:	15414
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38258, Cadmium **Region 3**

San Simeon Creek

LOE ID:	15413
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38272** **Region 3**

San Simeon Creek

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38272, Chromium **Region 3**

San Simeon Creek

LOE ID:	15871
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38272, Chromium **Region 3**

San Simeon Creek

LOE ID:	15884
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42611** **Region 3**

San Simeon Creek

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42611, Chrysene (C1-C4) — Region 3

San Simeon Creek

LOE ID:	15952
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42611, Chrysene (C1-C4) **Region 3**

San Simeon Creek

LOE ID:	15953
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	37870	Region 3
San Simeon Creek		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37870, Copper	**Region 3**
San Simeon Creek	

LOE ID:	16779
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37870, Copper **Region 3**

San Simeon Creek

LOE ID:	16780
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42615** **Region 3**

San Simeon Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42615, Dieldrin **Region 3**

San Simeon Creek

LOE ID:	16826
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42615, Dieldrin **Region 3**

San Simeon Creek

LOE ID:	16841
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42616 Region 3

San Simeon Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42616, Endrin Region 3

San Simeon Creek

LOE ID:	16548
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42616, Endrin **Region 3**

San Simeon Creek

LOE ID:	16547
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42626 Region 3
San Simeon Creek

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42626, Fluoranthene Region 3
San Simeon Creek

LOE ID:	16393
Pollutant:	Fluoranthene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42626, Fluoranthene **Region 3**

San Simeon Creek

LOE ID:	16380
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42618** **Region 3**

San Simeon Creek

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42618, Fluorene **Region 3**

San Simeon Creek

LOE ID:	17274
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42618, Fluorene **Region 3**

San Simeon Creek

LOE ID:	17261
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38574	Region 3
San Simeon Creek		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 38574, Lead **Region 3**

San Simeon Creek

LOE ID:	17359
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38574, Lead **Region 3**

San Simeon Creek

LOE ID:	17358
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38238**	**Region 3**
San Simeon Creek		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38238, Mercury **Region 3**

San Simeon Creek

LOE ID:	17161
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38238, Mercury **Region 3**

San Simeon Creek

LOE ID:	17160
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42619**	**Region 3**
San Simeon Creek		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42619, Naphthalene **Region 3**

San Simeon Creek

LOE ID:	17010
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42619, Naphthalene **Region 3**

San Simeon Creek

LOE ID:	17245
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38239**	**Region 3**
San Simeon Creek		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single

sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38239, Nickel **Region 3**

San Simeon Creek

LOE ID:	16556
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38239, Nickel **Region 3**

San Simeon Creek

LOE ID:	16555
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42629** **Region 3**

San Simeon Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

Conclusion:	the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42629, Phenanthrene **Region 3**

San Simeon Creek

LOE ID:	16960
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42629, Phenanthrene **Region 3**

San Simeon Creek

LOE ID:	16961
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42621** **Region 3**

San Simeon Creek

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42621, Pyrene **Region 3**

San Simeon Creek

LOE ID:	17861
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42621, Pyrene **Region 3**

San Simeon Creek

LOE ID:	17860
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38314** **Region 3**

San Simeon Creek

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38314, Zinc — Region 3

San Simeon Creek

LOE ID:	17954
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38314, Zinc **Region 3**

San Simeon Creek

LOE ID:	17953
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Simeon Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Simeon Creek was collected at 1 monitoring site [310SSC-San Simeon Creek at State Park foot bridge]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arroyo De La Cruz**
Water Body ID: **CAR3101201320020117141339**
Water Body Type: **River & Stream**

DECISION ID **36268** **Region 3**
Arroyo De La Cruz

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Reason for Delisting: Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.

Regional Board Staff Decision Recommendation: This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36268, Escherichia coli (E. coli) **Region 3**
Arroyo De La Cruz

LOE ID: 10915

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 19
Number of Exceedances: 4

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 19 samples exceed the criterion for Escherichia coli.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 1/10/2005-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36268, Escherichia coli (E. coli) **Region 3**

Arroyo De La Cruz

LOE ID:	18499
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36268, Escherichia coli (E. coli) Region 3

Arroyo De La Cruz

LOE ID:	18498
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36268, Escherichia coli (E. coli) Region 3

Arroyo De La Cruz

LOE ID:	10916
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 1/10/2005-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36154 — Region 3

Arroyo De La Cruz

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Delisting due to spatial change or other CalWQA administrative reason
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved — Region 3

Arroyo De La Cruz

LOE ID:	12693
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz

LOE ID:	12654
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz

LOE ID:	12655
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 20 of 39 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz

LOE ID:	12656
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 20 of 39 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz

LOE ID:	12707
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz

LOE ID:	12692
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen

	concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz

LOE ID:	12691
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz

LOE ID:	18141
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz

LOE ID:	18156
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36154, Oxygen, Dissolved **Region 3**

Arroyo De La Cruz

LOE ID:	12653
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 9 of 39 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36381 Region 3

Arroyo De La Cruz

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36381, Ammonia Region 3

Arroyo De La Cruz

LOE ID:	10060
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of

	the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36381, Ammonia **Region 3**

Arroyo De La Cruz

LOE ID:	10090
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36381, Ammonia **Region 3**

Arroyo De La Cruz

LOE ID:	10091
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36337** **Region 3**

Arroyo De La Cruz

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz

Lagoon.

Regional Board Staff Decision Recommendation: This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36337, Boron **Region 3**

Arroyo De La Cruz

LOE ID:	10073
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36338** **Region 3**

Arroyo De La Cruz

Pollutant: **Chloride**

Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36338, Chloride **Region 3**

Arroyo De La Cruz

LOE ID:	10074
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42298	Region 3
Arroyo De La Cruz		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 42298, Chlorophyll-a	**Region 3**
Arroyo De La Cruz	

LOE ID:	10092
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42298, Chlorophyll-a **Region 3**

Arroyo De La Cruz

LOE ID:	10105
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42298, Chlorophyll-a **Region 3**

Arroyo De La Cruz

LOE ID:	12689
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42298, Chlorophyll-a **Region 3**

Arroyo De La Cruz

LOE ID:	12690
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected on a single day 7/3/2001. Diurnal monitoring conducted in summer

	months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36386 Region 3

Arroyo De La Cruz

Pollutant:	**Electrical Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36386, Electrical Conductivity Region 3

Arroyo De La Cruz

LOE ID:	17388
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when

	conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36386, Electrical Conductivity **Region 3**

Arroyo De La Cruz

LOE ID:	10860
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36386, Electrical Conductivity — Region 3

Arroyo De La Cruz

LOE ID:	17512
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36386, Electrical Conductivity — Region 3

Arroyo De La Cruz

LOE ID:	10895
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36320 Region 3

Arroyo De La Cruz

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36320, Fecal Coliform Region 3

Arroyo De La Cruz

LOE ID:	10859

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36320, Fecal Coliform **Region 3**

Arroyo De La Cruz

LOE ID:	10858
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36275 Region 3

Arroyo De La Cruz

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36275, Nitrate Region 3

Arroyo De La Cruz

LOE ID:	10076
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36275, Nitrate **Region 3**

Arroyo De La Cruz

LOE ID:	10075
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36275, Nitrate **Region 3**

Arroyo De La Cruz

LOE ID:	18324
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-

	ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36275, Nitrate **Region 3**

Arroyo De La Cruz

LOE ID:	18325
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **36336** **Region 3**

Arroyo De La Cruz

Pollutant:	**Nitrogen, ammonia (Total Ammonia)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36336, Nitrogen, ammonia (Total Ammonia) **Region 3**

Arroyo De La Cruz

LOE ID:	10060
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36139	Region 3
Arroyo De La Cruz		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36139, Sodium	**Region 3**
Arroyo De La Cruz	

LOE ID:	10089
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36193 Region 3

Arroyo De La Cruz

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36193, Temperature, water Region 3

Arroyo De La Cruz

LOE ID:	12675
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36193, Temperature, water **Region 3**

Arroyo De La Cruz

LOE ID:	18730
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36193, Temperature, water **Region 3**

Arroyo De La Cruz

LOE ID:	12711
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42982** **Region 3**

Arroyo De La Cruz

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon. .

Line of Evidence (LOE) for Decision ID 42982, Turbidity **Region 3**

Arroyo De La Cruz

LOE ID:	12673
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42982, Turbidity — Region 3

Arroyo De La Cruz

LOE ID:	12674
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42982, Turbidity — Region 3

Arroyo De La Cruz

LOE ID:	12709
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/1/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42982, Turbidity **Region 3**

Arroyo De La Cruz

LOE ID:	12710
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/1/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36143 Region 3

Arroyo De La Cruz

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision will be retired. All associated data and information originally included in this assessment will be transferred to the new decision that reflects the correctly mapped segment for this data. The monitoring station 310ADC is located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision for Arroyo de la Cruz are now associated with a new decision for Arroyo de la Cruz Lagoon.
Regional Board Staff Decision Recommendation:	This decision should be retired because the data associated with this decision were collected from a monitoring station located in a newly delineated reach of the creek (Arroyo de la Cruz Lagoon). The LOEs associated with this decision are now associated with a new decision for Arroyo de la Cruz Lagoon.

Line of Evidence (LOE) for Decision ID 36143, pH Region 3

Arroyo De La Cruz

LOE ID:	18980
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	18981
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	18982
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	19001
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	18999
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	19000
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310-ARROY-42 - Arroyo de la Cruz under HWY 1]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10896
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10912
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10913
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH — Region 3

Arroyo De La Cruz

LOE ID:	10914
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH — Region 3

Arroyo De La Cruz

LOE ID:	10879
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10897
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10898
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 7/3/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10876

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10877
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38

	samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10878
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]

Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10880
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36143, pH **Region 3**

Arroyo De La Cruz

LOE ID:	10894
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Arroyo de la Cruz to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo de la Cruz was collected at 1 monitoring site [310ADC-Arroyo de la Cruz at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2001-9/27/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Carpoforo Creek**
Water Body ID: **CAR3101102120020124134609**
Water Body Type: **River & Stream**

DECISION ID **39834** **Region 3**
San Carpoforo Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 17 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 18 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 17 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 18 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39834, Ammonia **Region 3**
San Carpoforo Creek

LOE ID: 9940

Pollutant: Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39834, Ammonia **Region 3**

San Carpoforo Creek

LOE ID:	9953
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39834, Ammonia **Region 3**

San Carpoforo Creek

LOE ID:	9571
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39834, Ammonia **Region 3**

San Carpoforo Creek

LOE ID:	51673
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39834, Ammonia **Region 3**

San Carpoforo Creek

LOE ID:	51633
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39834, Ammonia **Region 3**

San Carpoforo Creek

LOE ID:	51754
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries)

	states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 52510 Region 3

San Carpoforo Creek

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, neither of the two samples exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the SoCal IBI. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 52510, Benthic Community Effects Region 3

San Carpoforo Creek

LOE ID:	57762
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The 2 IBI scores in this water body are above 40 and therefore are not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 310SCPxxx-San Carpoforo Creek @ Hwy 1
Temporal Representation:	Surveys done on May 1, 2009 and June 11, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

DECISION ID	**39768**	**Region 3**
San Carpoforo Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39768, Boron **Region 3**

San Carpoforo Creek

LOE ID:	51720
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39768, Boron **Region 3**

San Carpoforo Creek

LOE ID:	9954
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/18/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39592**	**Region 3**
San Carpoforo Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39592, Chloride **Region 3**

San Carpoforo Creek

LOE ID:	9955
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]

Temporal Representation:	Data was collected over the time period 1/22/2002-6/18/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39592, Chloride **Region 3**

San Carpoforo Creek

LOE ID:	51721
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39956** **Region 3**

San Carpoforo Creek

Pollutant: **Chlorophyll-a**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 18 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 18 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39956, Chlorophyll-a **Region 3**

San Carpoforo Creek

LOE ID:	51674
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39956, Chlorophyll-a **Region 3**

San Carpoforo Creek

LOE ID:	51755
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39956, Chlorophyll-a **Region 3**

San Carpoforo Creek

LOE ID:	9970
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39956, Chlorophyll-a **Region 3**

San Carpoforo Creek

LOE ID:	9971
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [

	310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39633** **Region 3**

San Carpoforo Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 10 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 3 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 10 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 3 samples exceed the water quality objective for non-contact recreation. Neither of these exceed and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39633, Escherichia coli (E. coli) **Region 3**

San Carpoforo Creek

LOE ID:	18474

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39633, Escherichia coli (E. coli) Region 3

San Carpoforo Creek

LOE ID:	18475
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a

	minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39633, Escherichia coli (E. coli) **Region 3**

San Carpoforo Creek

LOE ID:	51653
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39693** **Region 3**

San Carpoforo Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of 18 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 0 of 18 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 18 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of the 18 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39693, Fecal Coliform — Region 3

San Carpoforo Creek

LOE ID:	51652
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39693, Fecal Coliform **Region 3**

San Carpoforo Creek

LOE ID:	51655
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39693, Fecal Coliform **Region 3**

San Carpoforo Creek

LOE ID:	17625
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39693, Fecal Coliform **Region 3**

San Carpoforo Creek

LOE ID:	17639
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39693, Fecal Coliform **Region 3**

San Carpoforo Creek

LOE ID:	11752
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39693, Fecal Coliform **Region 3**

San Carpoforo Creek

LOE ID:	11751
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39694** **Region 3**

San Carpoforo Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 8 nitrate samples exceed the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 8 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 8 nitrate/nitrite samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 22 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 8 nitrate samples exceed the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 8 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 8 nitrate/nitrite samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39694, Nitrate **Region 3**

San Carpoforo Creek

LOE ID:	18357
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39694, Nitrate **Region 3**

San Carpoforo Creek

LOE ID:	18356
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39694, Nitrate **Region 3**

San Carpoforo Creek

LOE ID:	9956
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39694, Nitrate **Region 3**

San Carpoforo Creek

LOE ID:	9968
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39694, Nitrate **Region 3**

San Carpoforo Creek

LOE ID:	51723
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39694, Nitrate **Region 3**

San Carpoforo Creek

LOE ID:	51636
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39694, Nitrate **Region 3**

San Carpoforo Creek

LOE ID:	51635
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39694, Nitrate — Region 3

San Carpoforo Creek

LOE ID:	51675
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39694, Nitrate — Region 3

San Carpoforo Creek

LOE ID:	51676
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39694, Nitrate **Region 3**

San Carpoforo Creek

LOE ID:	51757
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39694, Nitrate **Region 3**

San Carpoforo Creek

LOE ID:	51756
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**53466**	**Region 3**
San Carpoforo Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the eight samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the eight samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53466, Nitrogen, Nitrite — Region 3

San Carpoforo Creek

LOE ID:	51737
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39957 — Region 3

San Carpoforo Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 samples exceeded the water quality objectives for dissolved oxygen for both Cold or Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 22 samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	51486
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	51692
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	51485
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	51691
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	18116
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	12683
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	18115
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support

	and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	12681
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	12682
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39957, Oxygen, Dissolved **Region 3**

San Carpoforo Creek

LOE ID:	12684
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39607**	**Region 3**
San Carpoforo Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the water quality objective for agricultural uses.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39607, Sodium **Region 3**

San Carpoforo Creek

LOE ID:	9969
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/18/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39607, Sodium **Region 3**

San Carpoforo Creek

LOE ID:	51739
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39970** **Region 3**

San Carpoforo Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. One of the 22 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 22 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39970, Specific Conductivity **Region 3**

San Carpoforo Creek

LOE ID:	51722
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39970, Specific Conductivity **Region 3**

San Carpoforo Creek

LOE ID:	17530
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39970, Specific Conductivity **Region 3**

San Carpoforo Creek

LOE ID:	17587
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39970, Specific Conductivity **Region 3**

San Carpoforo Creek

LOE ID:	11753
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39608**	**Region 3**
San Carpoforo Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 22 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39608, Temperature, water **Region 3**

San Carpoforo Creek

LOE ID:	12702
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39608, Temperature, water **Region 3**

San Carpoforo Creek

LOE ID:	18833
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39608, Temperature, water **Region 3**

San Carpoforo Creek

LOE ID:	51489
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed

	the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**39565**	**Region 3**
San Carpoforo Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 18 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 0 of the 18 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 18 samples exceed the evaluation guideline for both Cold and Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39565, Turbidity **Region 3**

San Carpoforo Creek

LOE ID:	51694
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39565, Turbidity **Region 3**

San Carpoforo Creek

LOE ID:	51488
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39565, Turbidity **Region 3**

San Carpoforo Creek

LOE ID:	12701
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39565, Turbidity **Region 3**

San Carpoforo Creek

LOE ID:	12700
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	39911	Region 3
San Carpoforo Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. One of the 22 samples exceed the water quality objectives for Cold Fresh Water Habitat, Warm Freshwater Habitat and Agricultural Supply. Two of the 22 samples exceeded the water quality objectives for Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 22 samples exceed the water quality objectives for Cold Fresh Water Habitat, Warm Freshwater Habitat and Agricultural Supply. Two of the 22 samples exceeded the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39911, pH	**Region 3**
San Carpoforo Creek	

LOE ID:	11754
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	11772
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	11771
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	18050
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	18091
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	18049
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	18048
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	18092
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	18047
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [

	310-CARPO-41 - San Carpoforo]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	11773
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	11774
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	11770
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	51656
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	51487
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	51637
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for pH.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39911, pH **Region 3**

San Carpoforo Creek

LOE ID:	51693
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39911, pH — Region 3

San Carpoforo Creek

LOE ID:	51654
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39911, pH — Region 3

San Carpoforo Creek

LOE ID:	51738
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Carpoforo Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Carpoforo Creek was collected at 1 monitoring site [310SCP-San Carpoforo Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Las Tablas Creek**
Water Body ID: **CAR3098129319980825123721**
Water Body Type: **River & Stream**

DECISION ID **42775** **Region 3**
Las Tablas Creek

Pollutant: **Metals**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Inactive Mining
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: Listing decisions made prior to 2006 were not held in an assessment database.

A detailed data and source assessment can be found in the Las Tablas Creek and Lake Nacimiento Total Maximum Daily Load for Mercury Draft Project Report dated September 25, 2002. This TMDL has been approved by the Central Coast Water Board in 2003. However, neither State Board nor USEPA approved this TMDL and the TMDL project has been indefinitely postponed until USEPA takes further action regarding potential superfund site.

The Draft TMDL project report identifies mercury as the primary metal of concern however, nickel content of waters in the Klau Branch tributary to the South Fork Las Tablas Creek has also been found to exceed Basin Plan Water Quality Objectives.

The Draft TMDL project report can be viewed here:
http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/las_tablas_lake_naci/index.shtml

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42775, Metals **Region 3**
Las Tablas Creek

LOE ID: 3952

Pollutant: Metals
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Las Tablas Creek, South Fork**
Water Body ID: **CAR3098129019980828110227**
Water Body Type: **River & Stream**

DECISION ID **34055** **Region 3**
Las Tablas Creek, South Fork

Pollutant:	**Metals**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Inactive Mining
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Listing decisions made prior to 2006 were not held in an assessment database. A detailed data and source assessment can be found in the Las Tablas Creek and Lake Nacimiento Total Maximum Daily Load for Mercury Draft Project Report dated September 25, 2002. This TMDL has been approved by the Central Coast Water Board in 2003. However, neither State Board nor USEPA approved this TMDL and the TMDL project has been indefinitely postponed until USEPA takes further action regarding potential superfund site. The Draft TMDL project report identifies mercury as the primary metal of concern however, nickel content of waters in the Klau Branch tributary to the South Fork Las Tablas Creek has also been found to exceed Basin Plan Water Quality Objectives. The Draft TMDL project report can be viewed here: http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/las_tablas_lake_naci/index.shtml
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34055, Metals **Region 3**
Las Tablas Creek, South Fork

LOE ID:	3954
Pollutant:	Metals
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Las Tablas Creek, North Fork**
Water Body ID: **CAR3098129019980828104645**
Water Body Type: **River & Stream**

DECISION ID **34054** **Region 3**
Las Tablas Creek, North Fork

Pollutant: **Metals**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Inactive Mining
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: Listing decisions made prior to 2006 were not held in an assessment database.

A detailed data and source assessment can be found in the Las Tablas Creek and Lake Nacimiento Total Maximum Daily Load for Mercury Draft Project Report dated September 25, 2002. This TMDL has been approved by the Central Coast Water Board in 2003. However, neither State Board nor USEPA approved this TMDL and the TMDL project has been indefinitely postponed until USEPA takes further action regarding potential superfund site.

The Draft TMDL project report identifies mercury as the primary metal of concern however, nickel content of waters in the Klau Branch tributary to the South Fork Las Tablas Creek has also been found to exceed Basin Plan Water Quality Objectives.

The Draft TMDL project report can be viewed here:
http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/las_tablas_lake_naci/index.shtml

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34054, Metals **Region 3**
Las Tablas Creek, North Fork

LOE ID: 3953

Pollutant: Metals
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Antonio River (above San Antonio Reservoir)**
Water Body ID: **CAR3098122820020124134039**
Water Body Type: **River & Stream**

DECISION ID **51342** **Region 3**
San Antonio River (above San Antonio Reservoir)

Pollutant: **Alkalinity as CaCO3**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for Cold or Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51342, Alkalinity as CaCO3 **Region 3**
San Antonio River (above San Antonio Reservoir)

LOE ID: 57776

Pollutant: Alkalinity as CaCO3
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51342, Alkalinity as CaCO3 **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57775
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was

	collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51343 Region 3

San Antonio River (above San Antonio Reservoir)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for Cold or Warm Freshwater Habitats nor does the single sample exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51343, Ammonia Region 3

San Antonio River (above San Antonio Reservoir)

LOE ID:	57777
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51343, Ammonia **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57778
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51343, Ammonia **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57779
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories (USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006)).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51354 **Region 3**

San Antonio River (above San Antonio Reservoir)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status.

	Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used shows one sample with an IBI score of 77 and that is not exceeding the water quality objective, but this is not enough information to determine an appropriate use support rating. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the California Stream Condition Index. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51354, Benthic Community Effects **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57780
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score above 40. The IBI score for this site was 77.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The sample was collected from San Antonio River.
Temporal Representation:	The sample was collected in August 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Ref Condition Management Plan 2008 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	

DECISION ID 51345 **Region 3**

San Antonio River (above San Antonio Reservoir)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51345, Chloride **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57782
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51345, Chloride **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57783
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Chapter III, Section II. Table 3-7 specifies the Chloride objective for the San Antonio River is 20 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51345, Chloride **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57781
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Chapter III, Section II. Table 3-7 specifies the Chloride objective for the San Antonio River is 20 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51346 Region 3

San Antonio River (above San Antonio Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51346, Nitrate **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57785
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51346, Nitrate **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57786
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51347 Region 3

San Antonio River (above San Antonio Reservoir)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51347, Nitrogen, Nitrite **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57787
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51347, Nitrogen, Nitrite **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57788
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51233 Region 3

San Antonio River (above San Antonio Reservoir)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for Cold or Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51233, Oxygen, Dissolved Region 3

San Antonio River (above San Antonio Reservoir)

LOE ID:	57791
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51233, Oxygen, Dissolved **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57789
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51348 Region 3

San Antonio River (above San Antonio Reservoir)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51348, Specific Conductivity Region 3

San Antonio River (above San Antonio Reservoir)

LOE ID:	57799
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51350 Region 3

San Antonio River (above San Antonio Reservoir)

Pollutant:	**Sulfates**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.The single sample did not exceed the water quality objectives and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51350, Sulfates **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57800
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Chapter III, Section II. Table 3-7 specifies the Sulfate objective for the San Antonio River is 80 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51350, Sulfates **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57744
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sulfate.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Chapter III, Section II. Table 3-7 specifies the Sulfate objective for the San Antonio River is 80 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51351 Region 3

San Antonio River (above San Antonio Reservoir)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the evaluation guideline but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51351, Temperature, water **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57745
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51352 **Region 3**

San Antonio River (above San Antonio Reservoir)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for pH. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the

use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51352, pH **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57793
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51352, pH **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57796

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51352, pH **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57794
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]

Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51352, pH **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57795
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51352, pH **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57797
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51352, pH **Region 3**

San Antonio River (above San Antonio Reservoir)

LOE ID:	57792
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for San Antonio River (above San Antonio Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Antonio River (above San Antonio Reservoir) was collected at 1 monitoring site [San Antonio River - 907SDCHC3]
Temporal Representation:	Data was collected on a single day 8/26/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)**
Water Body ID: **CAR309811772002031911222 6**
Water Body Type: **River & Stream**

DECISION ID **33359** **Region 3**
Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The site specific objective is evaluated and the sample counts for the two LOEs are summed even though they have two different beneficial uses. The appropriate use designation for application of the site specific objective is the Warm Freshwater Habitat objective. All 44 samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and all seven of the annual means also exceed the site specific objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All seven of the annual means exceed the site specific objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33359, Chloride **Region 3**
Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID: 51273

Pollutant: Chloride
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33359, Chloride **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	1890
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	42
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Forty-two of 42 samples exceeded the water quality objective (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: 20 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Three stations.
Temporal Representation:	Monthly sampling events.
Environmental Conditions:	
QAPP Information:	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
QAPP Information Reference(s):	

DECISION ID 44574 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The site specific objective is evaluated and the sample counts for the two LOEs are summed even though they have two different beneficial uses. The appropriate use designation for application of the site specific objective is the Warm Freshwater Habitat objective. All 34 samples exceed the site specific water quality objective when counted as single sample maximums. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and all eight of the annual means also exceed the site specific objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All eight of the annual means exceed the site specific objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44574, Sodium Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	1891
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	32
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Thirty-two of 32 samples exceed the water quality objective (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: 20 mg/L.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Three stations.
Temporal Representation:	Monthly sampling.
Environmental Conditions:	
QAPP Information:	Central Coast Ambient Monitoring Program (CCAMP) QA/QC.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44574, Sodium **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51286
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Sodium.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40274	Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Thirty lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Twelve of the 61 samples exceed the water quality objective for Agriculture and 18 of the 61 samples exceed the water quality objectives for Drinking Water and Recreation. These uses are not supported. However, only eight of the 61 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and these uses are fully supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 61 samples exceed the water quality objective for Agriculture and 18 of the 61 samples exceed the water quality objectives for Drinking Water and Recreation and these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51303
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51272
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51270
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51256
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51234
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51241
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57366

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57363
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57362
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57365
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57364
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57377
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10797

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 9 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10798
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10779
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 6 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10705
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10706
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10963
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10964
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10965
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10966
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected on a single day 9/2/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10794
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10795
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 9 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10796
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 9 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41

	bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18107
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18103

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18104
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18105
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18106
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 5 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40274, pH **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18087
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13

Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40063 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Six LOEs summarize unionized ammonia data in which two of the 44 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 76 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 44 samples exceed the water quality objective for unionized ammonia and zero of the 76 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40063, Ammonia **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51244
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40063, Ammonia **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51235
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40063, Ammonia **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51288
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40063, Ammonia **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57319
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40063, Ammonia **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57318
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40063, Ammonia **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57326

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2011 edition of the drinking water standards and health advisories. (EPA 822-R-06-013, 2011).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40063, Ammonia **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	9509
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 2 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge].
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40063, Ammonia **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	9561
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 2 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge].
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40063, Ammonia **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	9559
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	70
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 70 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	40325	Region 3
Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 58 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 58 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40325, Boron	**Region 3**
Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)	

LOE ID:	9576
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 2 of 56 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 5/13/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40325, Boron **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51229
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [

	309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40254 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Three of the 72 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 72 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40254, Chlorophyll-a Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51289
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40254, Chlorophyll-a **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51236
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40254, Chlorophyll-a **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57327
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A ? Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40254, Chlorophyll-a **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57328
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A ? Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]

Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40254, Chlorophyll-a **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	9573
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 3 of 66 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40254, Chlorophyll-a **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	9560
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 3 of 66 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40340 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Five of 44 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 42 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 44 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 42 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40340, Escherichia coli (E. coli) Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10777
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 4 of 31

	samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40340, Escherichia coli (E. coli) Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	17517
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th

	Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40340, Escherichia coli (E. coli) **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	17518
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40340, Escherichia coli (E. coli) **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10778
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40340, Escherichia coli (E. coli) **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51258
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River

	(Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40392 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Nine of 75 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 1 of 75 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Nine of the 75 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of the 75 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40392, Fecal Coliform — Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51271
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40392, Fecal Coliform — Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51257
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40392, Fecal Coliform **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10760
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	69
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 69 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40392, Fecal Coliform **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	17642
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge, 309-SALIN-44 - Salinas River at Curbaril Bridge]

Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40392, Fecal Coliform **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	17643
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge, 309-SALIN-44 - Salinas River at Curbaril Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40392, Fecal Coliform **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10759
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	69
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 8 of 69 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40283 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 97 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use or the Municipal and Domestic Supply beneficial use. Zero of the 2 nitrate samples exceed the water quality objectives for Cold or Warm Freshwater Habitat. Zero of the 2 nitrate/nitrite samples exceed the water

quality objectives for Municipal and Domestic Supply. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 97 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use or the Municipal and Domestic Supply beneficial use. Zero of the 2 nitrate samples exceed the water quality objectives for Cold or Warm Freshwater Habitat. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat beneficial uses. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18285
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [

	309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	9574
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	70
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 70 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	13729
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 1 monitoring site [Creston Rd]
Temporal Representation:	Data was collected over the time period 2/11/2001-3/6/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18284
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	13715
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate

	exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 1 monitoring site [Creston Rd]
Temporal Representation:	Data was collected over the time period 2/11/2001-3/6/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	9575
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	70
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 70 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51255
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51254
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51299
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51300
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51238
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51237
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51232

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51231
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57345
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40283, Nitrate **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57344
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (California Code of Regulation, Title 22, Division 4, Chapter 15, Section 64431, Table 64431-A).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50171 **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50171, Nitrogen, Nitrite **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51233
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40327 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Nine of the 99 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and three of the 99 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 99 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and three of the 99 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51301
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51240
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51239
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51302
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57343
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57361
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57346
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57329
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18015
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [

	309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12630
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 3 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12838

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	69
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 6 of 69 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12837
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	69
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 69 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12839
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	69
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 6 of 69 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12893
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 3 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12892
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 3 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12836
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	69
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 3 of 69 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12629
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 4 of 9 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 3 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40327, Oxygen, Dissolved **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18014
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40328 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 76 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 76 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40328, Specific Conductivity Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	17570
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Conductivity(Us).

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge, 309-SALIN-44 - Salinas River at Curbaril Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40328, Specific Conductivity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10962
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 7/29/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40328, Specific Conductivity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	10776
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40328, Specific Conductivity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	13848
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 1 monitoring site [Creston Rd]
Temporal Representation:	Data was collected over the time period 2/11/2001-3/9/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40328, Specific Conductivity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51230
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40328, Specific Conductivity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57378
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 40219 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 98 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of the 98 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40219, Temperature, water Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57380

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40219, Temperature, water **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51243
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be

	demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40219, Temperature, water **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12631
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 3 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/17/2006. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40219, Temperature, water **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18765
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309-SALIN-44 - Salinas River at Curbaril Bridge, 309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock, 309-SALIN-45 - Salinas River at Old HWY 58 Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40219, Temperature, water **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12890
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	69
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 13 of 69 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50176 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the two samples exceed the site specific water quality objective when counted as single sample maximums.

However; this objective is set for the annual mean, not the single sample maximum. Annual means were not calculated for the data because there is only one sample per station in a give year. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The two annual means, based on a single data point from each of two sites, did exceed the site specific objective but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50176, Total Dissolved Solids **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51274
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 250 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40100	Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. One LOE summarizes sediment samples. Zero of the one sediment samples resulted in a significant toxic effect to one or more test organisms. Thirteen LOEs summarize water samples. Five water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess toxic effects in water samples. One of the seven water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the one sediment samples and one of the seven water samples resulted in a significant toxic effect to one or more test organisms. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40100, Toxicity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57332
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The sample was collected at station 309SUN-Salinas River up stream of Nacimiento River at Bradley Road.
Temporal Representation:	The sample was collected on 4/14/2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40100, Toxicity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57331
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the two samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The sample collected on 2/23/08 exhibited significant toxicity to growth of Pimephales promelas.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309SUN-Salinas River up stream from Nacimiento River at Bradley Road.
Temporal Representation:	The samples were collected in January and February 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40100, Toxicity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	24535
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40100, Toxicity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	24551
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40100, Toxicity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	24552
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40100, Toxicity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	24526
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40100, Toxicity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	24553
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [

	309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40100, Toxicity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	24525
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40330 Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Eight of the 43 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and this use is not supported. However, seven of the 43 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity and this use is supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 43 samples exceed the evaluation guideline for Cold Freshwater Habitat and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 40330, Turbidity Region 3

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12632
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	32
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 6 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 4/19/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40330, Turbidity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18702
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40330, Turbidity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	18688
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309-SALIN-47 - Salinas River at 13th Street bridge in Paso Robles, 309-SALIN-46 - Salinas River San Miguel at Estralia Rock]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40330, Turbidity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	12647
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Upper) to determine beneficial use support and results are as follows: 6 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 4 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge, 309SUN-Salinas River u/s Nacimiento at Bradley Road, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 4/19/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40330, Turbidity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57333

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Shoup, D.E. and D.H. Wahl (2009) states that largemouth bass had more difficulty in capturing rapidly moving fish prey at 40 NTU and the overall foraging rate was much lower.
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40330, Turbidity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	57334
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir) was collected at 1 monitoring site [Salinas River (Upper) - 309SUN]
Temporal Representation:	Data was collected over the time period 1/24/2008-4/14/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40330, Turbidity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51312
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 40330, Turbidity **Region 3**

Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)

LOE ID:	51242
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Upper) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Upper) was collected at 2 monitoring sites [309PSO-Salinas River at 13th Street in Paso Robles, 309SAT-Salinas River at Highway 41 bridge]
Temporal Representation:	Data was collected on a single day 2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Paso Robles Creek**
Water Body ID: **CAR3098115620020124123533**
Water Body Type: **River & Stream**

DECISION ID **40946** **Region 3**
Paso Robles Creek

Pollutant: **Electrical Conductivity**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Agricultural Supply water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40946, Electrical Conductivity **Region 3**
Paso Robles Creek

LOE ID: 17533

Pollutant: Electrical Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	40996	Region 3
Paso Robles Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two line of evidence is available in the administrative record to assess this pollutant. One of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40996, Escherichia coli (E. coli) **Region 3**

Paso Robles Creek

LOE ID:	17520
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40996, Escherichia coli (E. coli) **Region 3**

Paso Robles Creek

LOE ID:	17519
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40959**	**Region 3**
Paso Robles Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Water contact Recreation water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Water contact Recreation water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40959, Fecal Coliform — Region 3

Paso Robles Creek

LOE ID:	17622
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40959, Fecal Coliform — Region 3

Paso Robles Creek

LOE ID:	17621
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40999**	**Region 3**
Paso Robles Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objectives for Municipal and Domestic Supply or for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objectives for Municipal and Domestic Supply or for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40999, Nitrate **Region 3**

Paso Robles Creek

LOE ID:	18366
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40999, Nitrate **Region 3**

Paso Robles Creek

LOE ID:	18286
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41010**	**Region 3**
Paso Robles Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 4 samples exceed the Cold Freshwater Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 4 samples exceed the Cold Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41010, Oxygen, Dissolved **Region 3**

Paso Robles Creek

LOE ID:	18033
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40949** **Region 3**

Paso Robles Creek

Pollutant: **Temperature, water**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40949, Temperature, water **Region 3**

Paso Robles Creek

LOE ID:	18781
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41024 Region 3

Paso Robles Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41024, Turbidity Region 3

Paso Robles Creek

LOE ID:	18686
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40973**	**Region 3**
Paso Robles Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the Agricultural Supply water quality objective, None of the samples exceed the Cold Freshwater Habitat water quality objective and one of the 4 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed the Agricultural Supply water quality objective, None of the samples exceed the Cold Freshwater Habitat water quality objective and one of the 4 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40973, pH **Region 3**

Paso Robles Creek

LOE ID:	18145
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40973, pH **Region 3**

Paso Robles Creek

LOE ID:	18142
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40973, pH **Region 3**

Paso Robles Creek

LOE ID:	18143
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-

	PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40973, pH **Region 3**

Paso Robles Creek

LOE ID:	18144
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40973, pH **Region 3**

Paso Robles Creek

LOE ID:	18127
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Paso Robles Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Paso Robles Creek was collected at 1 monitoring site [309-PASOR-41 - Paso Robles Creek at Santa Rita Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Atascadero Creek (San Luis Obispo County)**
Water Body ID: **CAR3098112419990222145136**
Water Body Type: **River & Stream**

DECISION ID **36871** **Region 3**
Atascadero Creek (San Luis Obispo County)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

FIve lines of evidence are available in the administrative record to assess this pollutant. Seven of the 20 samples exceed the water quality objective for water contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 20 samples exceed the water quality objective for water contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36871, Escherichia coli (E. coli) **Region 3**
Atascadero Creek (San Luis Obispo County)

LOE ID: 11270

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36871, Escherichia coli (E. coli) Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	18415
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36871, Escherichia coli (E. coli) Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	18414
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36871, Escherichia coli (E. coli) Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	11254
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36871, Escherichia coli (E. coli) **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49537
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 2 of 2 samples

	exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **32857** **Region 3**

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Seven lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 44 samples exceed the water quality objective for water contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of the 44 samples exceed the water quality objective for water contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32857, Fecal Coliform — Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	17605
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-42 - Atascadero Creek Three Bridges, 309-ATASC-41 - Atascadero Creek West Mall Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32857, Fecal Coliform — Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	49539
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32857, Fecal Coliform **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	17606
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-42 - Atascadero Creek Three Bridges, 309-ATASC-41 - Atascadero Creek West Mall Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32857, Fecal Coliform **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11196
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 12 of 26 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32857, Fecal Coliform **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11211
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32857, Fecal Coliform **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	1889
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	14
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Four of 14 samples exceeded the water quality objectives (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There was 1 sampling site.
Temporal Representation:	There were monthly sampling events.
Environmental Conditions:	Samples taken 4/99 to 5/00 at 16 sample dates. Some sampling dates have multiple samples.
QAPP Information:	CCAMP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32857, Fecal Coliform **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49536
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 32769 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Sixteen of 42 samples exceed the Cold Freshwater Habitat objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Note that LOE 1888 summarizes data that is also summarized in LOE 12760. This data is not counted twice in this assessment but both LOEs are included. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixteen of 42 samples exceed the Cold Freshwater Habitat objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32769, Oxygen, Dissolved Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	1888
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Twelve of 18 samples exceeded the water quality objective (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Dissolved oxygen concentration shall not be reduced below 7.0 mg/L at any time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There was one sampling site.
Temporal Representation:	There was monthly sampling.
Environmental Conditions:	Samples taken from 4/7/99 to 5/15/00 on 18 sampling dates.
QAPP Information:	CCAMP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32769, Oxygen, Dissolved **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	12778
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]

Temporal Representation:	Data was collected over the time period 7/1/1999-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32769, Oxygen, Dissolved **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	12759
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 11 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32769, Oxygen, Dissolved **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	12760

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 16 of 27 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32769, Oxygen, Dissolved **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	12763
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(309) to determine beneficial use support and results are as

	follows: 4 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32769, Oxygen, Dissolved **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49214
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32769, Oxygen, Dissolved **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49215
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32769, Oxygen, Dissolved **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	18034
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37114 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data and none of 18 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and none of the 27 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This decision replaces the two previously approved decisions for each of the pollutants unionized ammonia (Decision 22953) and total ammonia (Decision 23245) and contains all of the LOEs from those decisions in addition to new LOEs. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples exceed either of the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37114, Ammonia **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	9470
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37114, Ammonia **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49516
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37114, Ammonia **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	9519
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero

	Creek(309) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37114, Ammonia **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49200
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46789 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. Two of 2 samples exceeded the water quality objective (scored below the threshold). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 2 samples were below the Index of Biological Integrity (IBI) value of 39 which indicates poor water quality for this area. However, pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46789, Benthic Community Effects Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	53280
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores in this water body were 39 or lower and therefore are below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Barbara Watershed Rotation 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or lower are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 315ATUxxx-Atascadero Creek @ Patterson Avenue
Temporal Representation:	Surveys done on April 10, 2008 and June 4, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Barbara Rotation).
QAPP Information Reference(s):	

DECISION ID **36870** **Region 3**

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36870, Boron **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49171
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36870, Boron **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	9520
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	24

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 5/13/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36789 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 27 samples exceed the water quality objective and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36789, Chloride **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	9521
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36789, Chloride **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49172
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41719 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 24 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. However this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41719, Chlorophyll-a **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	9525
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41719, Chlorophyll-a **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49201
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36751 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 33 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Drinking Water Supply beneficial use. Zero of the 2 nitrate samples exceed the water quality objective for Cold Freshwater Habitat. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for Agriculture or Municipal and Domestic Supply. Zero of the 2 nitrate/nitrite samples exceed the water quality objective for Cold Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 33 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Drinking Water Supply beneficial use. Zero of the 2 nitrate samples exceed the water quality objective for Cold Freshwater Habitat. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for Agriculture or Municipal and Domestic Supply. Zero of the 2 nitrate/nitrite samples exceed the water quality objective for Cold Freshwater Habitat. This is insufficient evidence to support listing for Cold Freshwater Habitat. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36751, Nitrate Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	49174
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36751, Nitrate **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49203
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36751, Nitrate **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49202
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region

	IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36751, Nitrate **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	18367
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36751, Nitrate **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	9523
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36751, Nitrate **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49518
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36751, Nitrate **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49186
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36751, Nitrate **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	18287
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36751, Nitrate **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	9522
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36751, Nitrate **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49519
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46790** **Region 3**

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46790, Nitrogen, Nitrite **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49187
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 46791 **Region 3**

Atascadero Creek (San Luis Obispo County)

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46791, PCBs (Polychlorinated biphenyls) **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	53281
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 315ATAxxx (315ATA-Atascadero Creek at Ward Drive).
Temporal Representation:	The samples were collected on 5/22/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 37567 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37567, Sodium Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	49189
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Sodium.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37567, Sodium **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	9524
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 5/13/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36726 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the water quality objective. Note that the pollutant name for the older LOEs is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36726, Specific Conductivity Region 3

Atascadero Creek (San Luis Obispo County)

LOE ID:	11233

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36726, Specific Conductivity **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11212
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Conductivity(Us).

Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 7/29/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36726, Specific Conductivity **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49173
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36726, Specific Conductivity **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	17549
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-42 - Atascadero Creek Three Bridges, 309-ATASC-41 - Atascadero Creek West Mall Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	37568	Region 3
Atascadero Creek (San Luis Obispo County)		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 42 samples exceed the water quality objective. In addition, A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Atascadero Creek as having "Definite run or population" as a tributary to the Salinas River. In addition, CCAMP staff has observed steelhead in the Creek on multiple occasions. Therefore this temperature Evaluation Guideline is relevant to the waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Three of the 42 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37568, Temperature, water	**Region 3**
Atascadero Creek (San Luis Obispo County)	

LOE ID:	12762
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 3 of 27 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 4/7/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37568, Temperature, water **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	12779
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 7/1/1999-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37568, Temperature, water **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	18782
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37568, Temperature, water **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49218
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41544 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 14 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 14 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41544, Turbidity **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49217
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41544, Turbidity **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	12781
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/26/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36930 Region 3

Atascadero Creek (San Luis Obispo County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five Beneficial Uses are assessed. One of the 28 samples exceed the water quality objectives for Agricultural Supply, Recreation and Municipal and Domestic Supply. Three of the 28 samples exceed the water quality objective for Cold Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. [Five Beneficial Uses are assessed. One of the 28 samples exceed the water quality objectives for Agricultural Supply, Recreation and Municipal and Domestic Supply. Three of the 28 samples exceed the water quality objective for Cold Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11213
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [

	309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11234
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11232
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11252
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(309) to determine beneficial use support and results are as

	follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11251
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/7/2006. Diurnal monitoring conducted in

	summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11250
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11253
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/7/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11214
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11231
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	11230
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 9/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	18163
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	18162
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	18161
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49216
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49540
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49538
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49520
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	49188
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 1 monitoring site [309ATS-Atascadero Creek at Highway 41]
Temporal Representation:	Data was collected over the time period 1/10/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	18164
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36930, pH **Region 3**

Atascadero Creek (San Luis Obispo County)

LOE ID:	18146
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Atascadero Creek(309) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Atascadero Creek(309) was collected at 2 monitoring sites [309-ATASC-41 - Atascadero Creek West Mall Bridge, 309-ATASC-42 - Atascadero Creek Three Bridges]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Alisal Creek (Monterey County)**
Water Body ID: **CAR3097009519990222130537**
Water Body Type: **River & Stream**

DECISION ID **41650** **Region 3**
Alisal Creek (Monterey County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Grazing-Related Sources | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Five of the 17 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 17 samples exceed the Evaluation Guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by the USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41650, Chlorophyll-a **Region 3**
Alisal Creek (Monterey County)

LOE ID: 10044

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41650, Chlorophyll-a **Region 3**

Alisal Creek (Monterey County)

LOE ID:	10043
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41650, Chlorophyll-a **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52981
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A â€“ Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41650, Chlorophyll-a **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52982
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A â€“ Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**32858**	**Region 3**
Alisal Creek (Monterey County)		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Grazing-Related Sources | Illegal dumping | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Five of the six samples exceed the water quality objective for contact recreation (i.e. swimming) and three of the six samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section NUMBER of the Policy.
2. The data used satisfies the data quantity requirements of section NUMBER of the Policy.
3. Five of the six samples exceed the water quality objective for contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA on January 31, 2012.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32858, Fecal Coliform **Region 3**

Alisal Creek (Monterey County)

LOE ID:	10843
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32858, Fecal Coliform **Region 3**

Alisal Creek (Monterey County)

LOE ID:	10857
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **46348** **Region 3**

Alisal Creek (Monterey County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 2.1 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence (LOE) is needed to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. One of the 8 nitrate samples exceed the water quality objectives for the Agriculture beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. However, seven of the eight nitrate samples and 10 of the 11 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Eight of the 8 nitrate samples and 10 of the 11 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 1) Water column chlorophyll a concentration ranged from 0.21 to 330 ug/L, at times exceeding screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 2) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 4.3 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). 3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 86 g/m2 ash-free dry weight (AFDW). This exceeds the Cold water screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006). 4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic chlorophyll a concentration of 216 mg/m2. This exceeds the Cold water screening threshold of 150 mg/m2 and the Warm water screening threshold of 200 mg/m2 (Creager, et al., 2006). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. However, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 4.1 of the Policy. 2. The data used satisfies the data quantity requirements of section 4.1 of the Policy. 3. Seven of the eight nitrate samples and 10 of the 11 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Eight of the 8 nitrate samples and 10 of the 11 nitrate/nitrite samples exceed the evaluation guideline for Cold and Warm Freshwater Habitat and there is evidence supporting the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 5. The Lower Salinas River Watershed Nutrient TMDL has been approved by the Central Coast Water Board in 2013 and approved by USEPA on 10/13/15. 6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Alisal Creek (Monterey County)

LOE ID:	27847
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Salinas (Salinas)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46348, Nitrate **Region 3**

Alisal Creek (Monterey County)

LOE ID:	10058
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46348, Nitrate **Region 3**

Alisal Creek (Monterey County)

LOE ID:	27845
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Salinas (Salinas).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road].
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46348, Nitrate **Region 3**

Alisal Creek (Monterey County)

LOE ID:	10057
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46348, Nitrate **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52985
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (California Code of Regulation, Title 22, Division 4, Chapter 15, Section 64431, Table 64431-A).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46348, Nitrate **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52987
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Water Quality Control Plan, Central Coast Region).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 10/30/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46348, Nitrate **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52988
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 10/30/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46348, Nitrate **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52999
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 10/30/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46348, Nitrate **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53000
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 10/30/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **36300** **Region 3**

Alisal Creek (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess these pollutants. Two of the 17 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat but none of the 17 samples exceed the dissolved oxygen water quality objective for Warm Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% and although 8 of 17 samples are below 85% saturation, the median of the data does not exceed (fall below) the Objective. Furthermore, the objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 17 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat but none of the 17 samples exceed the dissolved oxygen water quality objective for Warm Freshwater Habitat. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved — Region 3

Alisal Creek (Monterey County)

LOE ID:	12835
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected on a single day 10/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved **Region 3**

Alisal Creek (Monterey County)

LOE ID:	12834
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected on a single day 10/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved **Region 3**

Alisal Creek (Monterey County)

LOE ID:	12636
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved — Region 3

Alisal Creek (Monterey County)

LOE ID:	12635
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved — Region 3

Alisal Creek (Monterey County)

LOE ID:	12634
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved **Region 3**

Alisal Creek (Monterey County)

LOE ID:	12633
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved **Region 3**

Alisal Creek (Monterey County)

LOE ID:	12578
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected on a single day 10/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved **Region 3**

Alisal Creek (Monterey County)

LOE ID:	12849
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected on a single day 10/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53001
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53003
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]

Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52984
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36300, Oxygen, Dissolved **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52983
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46602 Region 3

Alisal Creek (Monterey County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46602, Specific Conductivity **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53010
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46603** **Region 3**

Alisal Creek (Monterey County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Four of the 11 samples exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 11 samples exceeded the evaluation guideline for the protection of Cold Freshwater Fish Habitat but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46603, Temperature, water **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53012
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1

	monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46606 Region 3

Alisal Creek (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the 11 samples exceed any of the water quality objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 11 samples exceed any of the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46606, pH Region 3

Alisal Creek (Monterey County)

LOE ID:	53004
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46606, pH **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53006
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46606, pH **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53005
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46606, pH **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53007
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46606, pH **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53008
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46606, pH **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53009
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **43010** **Region 3**

Alisal Creek (Monterey County)

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant

water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy.

The pollutant name has been changed to Toxicity. In previous listing cycles, separate fact sheets were developed for Sediment Toxicity and Unknown Toxicity (AKA water toxicity). In this current assessment cycle, those two fact sheets and all of the associated LOEs are combined into this single fact sheet for Toxicity.

Five lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).

Four LOEs summarize sediment samples. Two sediment samples are summarized in LOEs with the test organism name as the pollutant (i.e. invertebrate toxicity) and one sample is summarized in LOEs with the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available to assess this pollutant. Two of the three samples exceed the water quality objective for aquatic life protection because they resulted in a significant toxic effect to the test organisms.

One LOE summarizes water samples. All three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. Although the Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL addresses the water toxicity impairment and has been approved by USEPA, the sediment toxicity impairment is not yet addressed by an approved TMDL.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 sediment samples and all three water samples exceed the Water Quality Objective for toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 43010, Toxicity **Region 3**

Alisal Creek (Monterey County)

LOE ID:	23550
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when

	compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 2 monitoring sites [309SA1 - Alisal Creek at Old Stage Road, 309SA2 - Alisal Creek at Alisal Road]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43010, Toxicity **Region 3**

Alisal Creek (Monterey County)

LOE ID:	23551
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 2 monitoring sites [309SA1 - Alisal Creek at Old Stage Road, 309SA2 - Alisal Creek at Alisal Road]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 43010, Toxicity **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53015
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyallella azteca growth and survival (4/17/08). The toxicity tests for the samples included growth and survival of Hyalella azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309HRT Alisal Creek at Hartnell Rd.
Temporal Representation:	The sample was collected in April 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 43010, Toxicity **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53014
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. All three samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia. The samples were toxic to Ceriodaphnia dubia reproduction and survival (10/1/08, 1/24/08, 1/25/08).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309HRT Alisal Creek at Hartnell Rd.
Temporal Representation:	The samples were collected in 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 43010, Toxicity **Region 3**

Alisal Creek (Monterey County)

LOE ID:	78941
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to Hyallella azteca growth and survival (4/17/08). The toxicity tests for the samples included growth and survival of Hyalella azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309HRT Alisal Creek at Hartnell Rd.
Temporal Representation:	The sample was collected in April 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46605 Region 3

Alisal Creek (Monterey County)

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. All 11 samples exceed the evaluation guidelines for Cold Freshwater Habitat (Sigler et al. 1984) and for Warm Freshwater Habitat (Shoup, D.E. and Wahl D.H., 2009). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. All 11 samples exceed the evaluation guidelines and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 46605, Turbidity **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53017
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46605, Turbidity **Region 3**

Alisal Creek (Monterey County)

LOE ID:	53016
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Shoup, D.E. and D.H. Wahl (2009) states that largemouth bass had more difficulty in capturing rapidly moving fish prey at 40 NTU and the overall foraging rate was much lower.
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46601** **Region 3**

Alisal Creek (Monterey County)

Pollutant:	**Ammonia**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Grazing-Related Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which five of 11 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data in which zero of the 17 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

This decision replaces thepreviously approved decision for total ammonia (Decision 22717) and contains all of the LOEs from that decisions in addition to new LOEs.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This water body - pollutant combination should be placed in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.
This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of 11 samples exceed the Basin Plan general objective for unionized ammonia and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA however, applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 46601, Ammonia **Region 3**

Alisal Creek (Monterey County)

LOE ID:	10028
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46601, Ammonia **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52978
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46601, Ammonia **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52979
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46601, Ammonia **Region 3**

Alisal Creek (Monterey County)

LOE ID:	52980
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Alisal Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2011 edition of the drinking water standards and health advisories. (EPA 822-R-06-013, 2011).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories

Spatial Representation:	Data for this line of evidence for Alisal Creek (Monterey County) was collected at 1 monitoring site [Alisal Creek (Salinas) - 309HRT]
Temporal Representation:	Data was collected over the time period 1/25/2008-12/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 36144 Region 3

Alisal Creek (Monterey County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the six samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of six samples exceeded the objective but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36144, Boron Region 3

Alisal Creek (Monterey County)

LOE ID:	10041
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36153** **Region 3**

Alisal Creek (Monterey County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of six samples exceeded the objective but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36153, Chloride **Region 3**

Alisal Creek (Monterey County)

LOE ID:	10042
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41456 Region 3

Alisal Creek (Monterey County)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeds the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeds the Evaluation Guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41456, Dieldrin Region 3

Alisal Creek (Monterey County)

LOE ID:	19499
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 2 monitoring sites [309SA1 - Alisal Creek at Old Stage Road, 309SA2 - Alisal Creek at Alisal Road]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 41456, Dieldrin **Region 3**

Alisal Creek (Monterey County)

LOE ID:	19498
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 2 monitoring sites [309SA1 - Alisal Creek at Old Stage Road, 309SA2 - Alisal Creek at Alisal Road]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID 41600 Region 3

Alisal Creek (Monterey County)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeds the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeds the Evaluation Guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41600, Endrin Region 3

Alisal Creek (Monterey County)

LOE ID:	19549
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 2 monitoring sites [309SA1 - Alisal Creek at Old Stage Road, 309SA2 - Alisal Creek at Alisal Road]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 41600, Endrin **Region 3**

Alisal Creek (Monterey County)

LOE ID:	19526
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data

	for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 2 monitoring sites [309SA1 - Alisal Creek at Old Stage Road, 309SA2 - Alisal Creek at Alisal Road]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	**36187**	**Region 3**
Alisal Creek (Monterey County)		

Pollutant:	**Sodium**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Six of the six samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 6 samples exceeded the Agricultural Supply water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36187, Sodium **Region 3**

Alisal Creek (Monterey County)

LOE ID:	10059
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Alisal Creek (Salinas) to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Alisal Creek (Salinas) was collected at 1 monitoring site [309UAL-Salinas Reclamation Canal at Old Stage Road]
Temporal Representation:	Data was collected over the time period 7/28/1999-2/10/2000. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Chalone Creek**
Water Body ID: **CAR3097007820020117150045**
Water Body Type: **River & Stream**

DECISION ID **47161** **Region 3**
Chalone Creek

Pollutant: **Alkalinity as CaCO3**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47161, Alkalinity as CaCO3 **Region 3**
Chalone Creek

LOE ID: 53944

Pollutant: Alkalinity as CaCO3
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **47164** **Region 3**

Chalone Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for unionized ammonia and aquatic life protection nor for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47164, Ammonia **Region 3**

Chalone Creek

LOE ID:	53945
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47164, Ammonia **Region 3**

Chalone Creek

LOE ID:	53946
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories (USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006)).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**47166**	**Region 3**
Chalone Creek		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample had an IBI score of 63 which does not indicate an impairment to water quality. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 47166, Benthic Community Effects **Region 3**

Chalone Creek

LOE ID:	53947
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score above 40. The IBI score for this site was 63.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The sample was collected from Chalone Creek.
Temporal Representation:	The sample was collected in July 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Ref Condition Management Plan 2008 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	

DECISION ID **47162** **Region 3**

Chalone Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for addition to the CWA section 303(d) List under section 3.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47162, Chloride **Region 3**

Chalone Creek

LOE ID:	53949
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 53541 Region 3
Chalone Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53541, Nitrogen, Nitrite Region 3
Chalone Creek

LOE ID:	53953
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**47163**	**Region 3**
Chalone Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Warm Freshwater Habitat water quality objective but did exceed the Spawning Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Warm Freshwater Habitat water quality objective but did exceed the Spawning Habitat water quality objective. However this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47163, Oxygen, Dissolved **Region 3**

Chalone Creek

LOE ID:	53954
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47163, Oxygen, Dissolved **Region 3**

Chalone Creek

LOE ID:	53955
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 38578 Region 3

Chalone Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded and the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded.

Line of Evidence (LOE) for Decision ID 38578, Specific Conductivity Region 3

Chalone Creek

LOE ID:	53962
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38578, Specific Conductivity **Region 3**

Chalone Creek

LOE ID:	13886
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Metz Rd]
Temporal Representation:	Data was collected on a single day 3/5/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**47165**	**Region 3**
Chalone Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed any of the water quality objectives This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed any of the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47165, pH **Region 3**

Chalone Creek

LOE ID:	53958
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47165, pH **Region 3**

Chalone Creek

LOE ID:	53959
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47165, pH **Region 3**

Chalone Creek

LOE ID:	53960
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47165, pH **Region 3**

Chalone Creek

LOE ID:	53956
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47165, pH **Region 3**

Chalone Creek

LOE ID:	53957
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Chalone Creek - 907CCCR02]
Temporal Representation:	Data was collected on a single day 7/15/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	38334	Region 3
Chalone Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The sample does not exceed the water quality objective for Municipal and Domestic Supply. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample does not exceed the water quality objective for Municipal and Domestic Supply, and did not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38334, Nitrate	**Region 3**
Chalone Creek	

LOE ID:	13818
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Metz Rd]
Temporal Representation:	Data was collected on a single day 3/5/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38334, Nitrate **Region 3**

Chalone Creek

LOE ID:	13819
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Chalone Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Chalone Creek was collected at 1 monitoring site [Metz Rd]
Temporal Representation:	Data was collected on a single day 3/5/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pancho Rico Creek**
Water Body ID: **CAR3097003220020124123351**
Water Body Type: **River & Stream**

DECISION ID **40974** **Region 3**
Pancho Rico Creek

Pollutant: **Electrical Conductivity**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Four of the 7 samples exceed the Agricultural Supply water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 7 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40974, Electrical Conductivity **Region 3**
Pancho Rico Creek

LOE ID: 13885

Pollutant: Electrical Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pancho Rico Creek to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pancho Rico Creek was collected at 1 monitoring site [Sargents Rd]
Temporal Representation:	Data was collected over the time period 3/24/2000-2/16/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**41057**	**Region 3**
Pancho Rico Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 5 samples exceed the water quality objectives for Municipal & Domestic Supply or for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the water quality objectives for Municipal & Domestic Supply or for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to

determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41057, Nitrate **Region 3**

Pancho Rico Creek

LOE ID:	13816
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pancho Rico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pancho Rico Creek was collected at 1 monitoring site [Sargents Rd]
Temporal Representation:	Data was collected over the time period 1/12/2001-2/16/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41057, Nitrate **Region 3**

Pancho Rico Creek

LOE ID:	13817
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pancho Rico Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pancho Rico Creek was collected at 1 monitoring site [Sargents Rd]
Temporal Representation:	Data was collected over the time period 1/12/2001-2/16/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arroyo Seco River**
Water Body ID: **CAR3096003219990222144047**
Water Body Type: **River & Stream**

DECISION ID **36371** **Region 3**
Arroyo Seco River

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy.

Four lines of evidence are available in the administrative record to assess this pollutant. Seven of the 42 samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 42 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36371, Fecal Coliform **Region 3**
Arroyo Seco River

LOE ID: 10707

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	38
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 7 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36371, Fecal Coliform **Region 3**

Arroyo Seco River

LOE ID:	10708
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36371, Fecal Coliform **Region 3**

Arroyo Seco River

LOE ID:	49210
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36371, Fecal Coliform **Region 3**

Arroyo Seco River

LOE ID:	49213
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37414** **Region 3**

Arroyo Seco River

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Eleven of the 48 samples exceed the evaluation guideline (Moyle 1976) set to protect for steelhead trout, and thus support rejection of the null hypothesis. In addition, A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Arroyo Seco as having "Definite run or population" and cites the following from a 2007 National Marine Fisheries Report, "Arroyo Seco River is the most important remaining steelhead habitat in the Salinas River watershed." and also states that staff recovered the carcass of an adult steelhead from the Thorne Road crossing in 2008. In addition, CCAMP staff has observed steelhead in the River on multiple occasions. Therefore this Temperature Evaluation Guideline is relevant to the waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 48 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37414, Temperature, water **Region 3**

Arroyo Seco River

LOE ID:	12525
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 8 of 37 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37414, Temperature, water **Region 3**

Arroyo Seco River

LOE ID:	49195
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37414, Temperature, water **Region 3**

Arroyo Seco River

LOE ID:	12506
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 7/2/1999-8/15/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37414, Temperature, water **Region 3**

Arroyo Seco River

LOE ID:	13770

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco Rd]
Temporal Representation:	Data was collected on a single day 1/3/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37414, Temperature, water **Region 3**

Arroyo Seco River

LOE ID:	53128
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46672 Region 3

Arroyo Seco River

Pollutant:	**Alkalinity as CaCO3**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46672, Alkalinity as CaCO3 Region 3

Arroyo Seco River

LOE ID:	53258
Pollutant:	Alkalinity as CaCO3

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46672, Alkalinity as CaCO3 **Region 3**

Arroyo Seco River

LOE ID:	53268
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).

Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 36177 Region 3

Arroyo Seco River

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Six LOEs summarize unionized ammonia data and two aquatic life beneficial uses. None of 26 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and none of the 42 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This decision replaces the two previously approved decisions for each of the pollutants unionized ammonia (Decision 22750) and total ammonia (Decision 36177) and contains all of the LOEs from those decisions in addition to new LOEs. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded any of the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36177, Ammonia Region 3

Arroyo Seco River

LOE ID:	53269
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36177, Ammonia **Region 3**

Arroyo Seco River

LOE ID:	53271
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories (USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006)).

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36177, Ammonia **Region 3**

Arroyo Seco River

LOE ID:	53270
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36177, Ammonia **Region 3**

Arroyo Seco River

LOE ID:	9586
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36177, Ammonia **Region 3**

Arroyo Seco River

LOE ID:	9587
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36177, Ammonia **Region 3**

Arroyo Seco River

LOE ID:	9612
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36177, Ammonia **Region 3**

Arroyo Seco River

LOE ID:	49146
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36177, Ammonia **Region 3**

Arroyo Seco River

LOE ID:	49168
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36177, Ammonia **Region 3**

Arroyo Seco River

LOE ID:	49196
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46673** **Region 3**

Arroyo Seco River

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample showed conditions in this water body to be poor based on the SoCal IBI score. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 46673, Benthic Community Effects **Region 3**

Arroyo Seco River

LOE ID:	53272
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The IBI score for this site was 39.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The samples were collected from Arroyo Seco below Rocky Creek.
Temporal Representation:	The samples were collected in August 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Ref Condition Management Plan 2008 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	

DECISION ID	**36222**	**Region 3**
Arroyo Seco River		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 38 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 38 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36222, Boron **Region 3**

Arroyo Seco River

LOE ID:	49141
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36222, Boron **Region 3**

Arroyo Seco River

LOE ID:	9613
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 5/10/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36846**	**Region 3**
Arroyo Seco River		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. None of the 42 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 42 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36846, Chloride **Region 3**

Arroyo Seco River

LOE ID:	9614
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36846, Chloride **Region 3**

Arroyo Seco River

LOE ID:	49142
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36846, Chloride **Region 3**

Arroyo Seco River

LOE ID:	53091
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **41718** **Region 3**

Arroyo Seco River

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 35 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 35 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41718, Chlorophyll-a — Region 3

Arroyo Seco River

LOE ID:	49147
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41718, Chlorophyll-a — Region 3

Arroyo Seco River

LOE ID:	49169
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41718, Chlorophyll-a **Region 3**

Arroyo Seco River

LOE ID:	9588
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41718, Chlorophyll-a **Region 3**

Arroyo Seco River

LOE ID:	9993
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 31 samples

	exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36165**	**Region 3**
Arroyo Seco River		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Four of the 24 samples exceed the water quality objective for water contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 24 samples exceed the water quality objective for water contact recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36165, Escherichia coli (E. coli) **Region 3**

Arroyo Seco River

LOE ID:	10761
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36165, Escherichia coli (E. coli) — Region 3

Arroyo Seco River

LOE ID:	49211
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36165, Escherichia coli (E. coli) — Region 3

Arroyo Seco River

LOE ID:	10746
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 4 of 20 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36918**	**Region 3**
Arroyo Seco River		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 84 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial uses. Zero of the 4 nitrate samples exceed the water quality objective for Cold and Warm Freshwater Habitat. Zero of the 84 nitrate/nitrite samples exceed the water quality objectives for Agriculture or Municipal and Domestic Supply. Zero of the 4 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. No evidence was found to support nitrate causing impairment for Cold or Warm water habitats: 1) Dissolved oxygen for this water body ranged from 11.58 mg/L to 12.2 mg/L, never violating the Cold Freshwater Habitat water quality objective of 7.0 mg/L or the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Water column chlorophyll a concentration averaged 1.8 ug/L and peaked at 11.0 ug/L, never exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 3) Floating mats ranged from 0 to 10% cover, never exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 4) None of the model outputs from California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) exceeded screening thresholds for benthic algal contribution to oxygen deficit, algae biomass, or benthic chlorophyll a concentrations for this water body.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 84 nitrate samples exceed the water quality objectives for the Agricultural Supply or the Municipal and Domestic Supply beneficial uses. Zero of the 4 nitrate samples exceed the water quality objective for Cold and Warm Freshwater Habitats. Zero of the 84 nitrate/nitrite samples exceed the water quality objectives for Agriculture or Municipal and Domestic Supply. Zero of the 4 nitrate/nitrite samples exceed the water quality objective for Cold and Warm Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	9615
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	9616
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	49148
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	49153
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	49154
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	49157
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]

Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	13696
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 4 monitoring sites [Thorne Rd, Elm Rd (USGS stn) (Green br.), Arroyo Seco Rd, Los Padres NF Campground]
Temporal Representation:	Data was collected over the time period 10/11/2000-1/3/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	49170

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	49181
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	49198
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	49199
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	13695
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 4 monitoring sites [Thorne Rd, Elm Rd (USGS stn) (Green br.), Arroyo Seco Rd, Los Padres NF Campground]
Temporal Representation:	Data was collected over the time period 10/11/2000-1/3/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	53093
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36918, Nitrate **Region 3**

Arroyo Seco River

LOE ID:	53092
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46674 Region 3

Arroyo Seco River

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. 5.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46674, Nitrogen, Nitrite — Region 3

Arroyo Seco River

LOE ID:	53095
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46674, Nitrogen, Nitrite **Region 3**

Arroyo Seco River

LOE ID:	53094
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46674, Nitrogen, Nitrite **Region 3**

Arroyo Seco River

LOE ID:	49155
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36911**	**Region 3**
Arroyo Seco River		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Two beneficial uses are assessed. Four of 47 samples exceed the Cold Freshwater Habitat objective. One of the 47 samples exceed the objective for Warm Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Water Habitats and the dissolved oxygen levels appear to be supporting those beneficial uses. Therefore, the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 47 samples exceed the Cold Freshwater Habitat objective. One of the 47 samples exceed the objective for Warm Freshwater Habitat. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	49158
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	49159

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	49182
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	49183
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	12489
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 7/2/1999-8/15/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	12492
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as

	follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 7/2/1999-8/15/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	12507
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	12508
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	12509
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	12510
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	12491
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable

water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]

Temporal Representation: Data was collected over the time period 7/2/1999-8/15/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID: 12490

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 5
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]

Temporal Representation: Data was collected over the time period 7/2/1999-8/15/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	53108
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 36911, Oxygen, Dissolved **Region 3**

Arroyo Seco River

LOE ID:	53096
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 37218 Region 3

Arroyo Seco River

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 38 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 38 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37218, Sodium Region 3

Arroyo Seco River

LOE ID:	9585
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	34
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 5/10/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37218, Sodium **Region 3**

Arroyo Seco River

LOE ID:	49167
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Sodium.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SET-Arroyo Seco River at Thorne Road, 309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37284**	**Region 3**
Arroyo Seco River		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. None of the 83 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 83 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37284, Specific Conductivity	**Region 3**
Arroyo Seco River	

LOE ID:	13832
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 5 monitoring sites [Elm Rd (USGS stn) (Green br.), Arroyo Seco Rd, Thorne Rd, Los Padres NF Campground, Arroyo Seco Rd]
Temporal Representation:	Data was collected over the time period 3/15/2000-1/3/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37284, Specific Conductivity **Region 3**

Arroyo Seco River

LOE ID:	10745
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected over the time period 7/28/1999-8/15/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37284, Specific Conductivity **Region 3**

Arroyo Seco River

LOE ID:	10724
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37284, Specific Conductivity **Region 3**

Arroyo Seco River

LOE ID:	49143
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37284, Specific Conductivity **Region 3**

Arroyo Seco River

LOE ID:	53126
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **37274** **Region 3**

Arroyo Seco River

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 25 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37274, Turbidity **Region 3**

Arroyo Seco River

LOE ID:	12528
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 4/24/2000-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37274, Turbidity **Region 3**

Arroyo Seco River

LOE ID:	12543
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 4/24/2000-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37274, Turbidity **Region 3**

Arroyo Seco River

LOE ID:	49185
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37274, Turbidity **Region 3**

Arroyo Seco River

LOE ID:	49161
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37418** **Region 3**

Arroyo Seco River

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Six Beneficial Uses are assessed. Two of the 28 samples exceed the water quality objective for Agricultural Supply. One of the 28 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Four of the 28 samples exceed the water quality objectives for Recreation and for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six Beneficial Uses are assessed. Two of the 28 samples exceed the water quality objective for Agricultural Supply. One of the 28 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. Four of the 28 samples exceed the water quality objectives for Recreation and for Municipal and Domestic Supply. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10727
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 3 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	49209
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the

	criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10762
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]

Temporal Representation:	Data was collected on a single day 8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10763
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected on a single day 8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10725
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	22
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 2 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10726
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 1 of 22 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10780
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected on a single day 8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10781
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected on a single day 8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10743
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	22
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 3 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10744
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 1 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data

	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10764
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]

Temporal Representation:	Data was collected on a single day 8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10765
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arroyo Seco River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SEC-Arroyo Seco River at Elm Street]
Temporal Representation:	Data was collected on a single day 8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	49212
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	49144
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [

	309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	49156
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	49160
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	49184
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	10742
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 3 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 2 monitoring sites [309SEC-Arroyo Seco River at Elm Street, 309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	53114
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	53113
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.

Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	53112
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	53111
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	53109
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37418, pH **Region 3**

Arroyo Seco River

LOE ID:	53110
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [Arroyo Seco below Rocky Creek - 908SUP096]
Temporal Representation:	Data was collected on a single day 8/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **42981** **Region 3**

Arroyo Seco River

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant in water samples. None of the samples were toxic to test organisms (exhibited a significant increase in mortality or decrease in cell density compared to the laboratory control) and therefore do not exceed the narrative General Objective for toxicity, set to protect for aquatic life beneficial uses. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Three water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, three total samples are available

to assess toxic effects in water samples. zero of the three water samples resulted in a significant toxic effect to one or more test organisms.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples were toxic to test organisms. Therefore, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42981, Toxicity **Region 3**

Arroyo Seco River

LOE ID:	23601
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42981, Toxicity **Region 3**

Arroyo Seco River

LOE ID:	23600
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42981, Toxicity **Region 3**

Arroyo Seco River

LOE ID:	23581
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42981, Toxicity **Region 3**

Arroyo Seco River

LOE ID:	23580
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42981, Toxicity **Region 3**

Arroyo Seco River

LOE ID:	23585
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42981, Toxicity **Region 3**

Arroyo Seco River

LOE ID:	23586
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Arroyo Seco River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arroyo Seco River was collected at 1 monitoring site [309SET-Arroyo Seco River at Thorne Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Rita Creek (Monterey County)**
Water Body ID: **CAR3091900020060731111350**
Water Body Type: **River & Stream**

DECISION ID **37391** **Region 3**
Santa Rita Creek (Monterey County)

Pollutant: **Sodium**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 13 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 13 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37391, Sodium **Region 3**
Santa Rita Creek (Monterey County)

LOE ID: 52281

Pollutant: Sodium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Sodium.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37391, Sodium **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	9605
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 5 of 11 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38774 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 14 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 12 of the 14 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 14 samples exceed the evaluation guideline for Cold Freshwater Habitat and 12 of the 14 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38774, Turbidity — Region 3

Santa Rita Creek (Monterey County)

LOE ID:	12706
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38774, Turbidity — Region 3

Santa Rita Creek (Monterey County)

LOE ID:	12705
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38774, Turbidity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52214
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38774, Turbidity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52301
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	38629	Region 3
Santa Rita Creek (Monterey County)		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status

Seven lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which two of the 12 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 44 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 12 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Lower Salinas River Watershed Nutrient TMDL was approved by USEPA.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 38629, Ammonia	**Region 3**
Santa Rita Creek (Monterey County)	

LOE ID:	9600
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park].
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38629, Ammonia **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	17547
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road]
Temporal Representation:	Data was collected over the time period 8/26/2005-3/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38629, Ammonia **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	9598
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]

Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38629, Ammonia **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	9599
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park].
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38629, Ammonia **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52069

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected on a single day 2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38629, Ammonia **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52317
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38629, Ammonia **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52282
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected on a single day 2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37513 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Illegal dumping | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Sixty-four of 82 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 17 of 80 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-four of 82 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 17 of 80 samples exceed the water quality objective for non-contact recreation. Both of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA on 01/31/2012. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37513, Escherichia coli (E. coli) Region 3

Santa Rita Creek (Monterey County)

LOE ID:	52339
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37513, Escherichia coli (E. coli) **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10856
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37513, Escherichia coli (E. coli) Region 3

Santa Rita Creek (Monterey County)

LOE ID:	10855
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37513, Escherichia coli (E. coli) **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18433
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	66
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 17 of 66 samples exceed the criterion for E. coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue].
Temporal Representation:	Data was collected over the time period 8/26/2005-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37513, Escherichia coli (E. coli) **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18418
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	56
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 56 of 66 samples exceed the criterion for E. coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue].
Temporal Representation:	Data was collected over the time period 8/26/2005-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37513, Escherichia coli (E. coli) **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18402
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37513, Escherichia coli (E. coli) **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18403
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37149 **Region 3**

Santa Rita Creek (Monterey County)

Pollutant: **Fecal Coliform**

Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Illegal dumping | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Four lines of evidence are available in the administrative record to assess this pollutant. Eight of 14 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 14 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 14 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA on 01/31/2012.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37149, Fecal Coliform **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10838
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	6

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37149, Fecal Coliform **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10853
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37149, Fecal Coliform **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52338
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37149, Fecal Coliform **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52341
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 33080 **Region 3**

Santa Rita Creek (Monterey County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Nineteen lines of evidence are available in the administrative record to assess this pollutant. Four of the 91 nitrate samples exceed the water quality objectives for the Agricultural beneficial use. This se is fully supported. However, 17 of the 91 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Sixty-eight of the 91 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Two of the two nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing for Cold and Warm Freshwater Habitat. The following is a summary of the supporting evidence: 1) Dissolved oxygen for this water body ranged from 0.0 mg/L to 12.2 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. 2) Water column chlorophyll a concentration ranged up to 47ug/L, often exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 1.84 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of the 91 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Sixty-eight of the 91 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat and there is supporting evidence of eutrophication in this water segment. 5. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015. 6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52297
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52210
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52284
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52263
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1

	monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52320
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52071
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52319
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2

samples exceed the criterion for Nitrate as N.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	28128
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Salinas). Ten of the 11 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	9603
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	9604
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	28127
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Salinas). Ten of the 11 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	28151
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	76
Number of Exceedances:	54
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Clean streams project) (R3_CLNStrm)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street].
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	28148
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park].
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	28147
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1

	monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park].
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18305
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	76
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 76 samples exceed the criterion for Nitrate.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street].
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	28152
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	76
Number of Exceedances:	54
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Clean streams project) (R3_CLNStrm)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street].
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18320
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	76
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams

	project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 14 of 76 samples exceed the criterion for nitrate.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street].
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18524
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33080, Nitrate **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18525
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37150 **Region 3**

Santa Rita Creek (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Twenty-three of the 82 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and therefore this use is not supported. However, only 7 of the 82 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-three of the 82 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Nutrient TMDL has been approved by USEPA.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved — Region 3

Santa Rita Creek (Monterey County)

LOE ID:	12831
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18056
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 18 of 66 samples exceed the criterion for dissolved oxygen.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street].
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18020
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	12816
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	12817
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18019
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18057
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 66 samples exceed the criterion for dissolved oxygen.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue].
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams

Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	12832
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52299
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52298
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52212
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37150, Oxygen, Dissolved **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52211
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37495 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 13 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37495, Boron **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52244
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37495, Boron **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	9601
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37553 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 13 samples exceed the water quality objective for agricultural uses.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 13 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37553, Chloride **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	9602
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37553, Chloride **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52245
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38676 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 14 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 14 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38676, Chlorophyll-a — Region 3

Santa Rita Creek (Monterey County)

LOE ID:	52070
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38676, Chlorophyll-a **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52283
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface

	water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38676, Chlorophyll-a **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	12688
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38676, Chlorophyll-a **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	12703
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53094 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53094, Nitrogen, Nitrite Region 3

Santa Rita Creek (Monterey County)

LOE ID:	52265

Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37512 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Five lines of evidence are available in the administrative record to assess this pollutant. Four of the 84

samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Four of the 84 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37512, Specific Conductivity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52246
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37512, Specific Conductivity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	17645
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37512, Specific Conductivity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	17551
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	64
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 64 samples exceed the criterion for irrigation supply.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue]
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37512, Specific Conductivity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	17478
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 3 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue]
Temporal Representation:	Data was collected over the time period 10/1/2005-11/12/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37512, Specific Conductivity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10854
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1

	monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37127 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eight of the 84 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 84 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37127, Temperature, water Region 3

Santa Rita Creek (Monterey County)

LOE ID:	18799
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	68

Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 4 of 68 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road]
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37127, Temperature, water **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18672
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37127, Temperature, water **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	12722
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37127, Temperature, water **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52316
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37128** **Region 3**

Santa Rita Creek (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Four of the 87 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 3 of the 87 samples exceed the water quality objective for Agricultural Supply, Drinking Water, and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 87 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 3 of the 87 samples exceed the water quality objective for Agricultural Supply, Drinking Water, and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18239
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	71
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 -

	Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street]
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18238
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	71
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street]
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10874
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10890
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10875
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10873
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10872
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	10871
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data

	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18223
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	71
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street]
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18241
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	71
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street]
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18222
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	71
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street]
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18240
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	71
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial

	use support and results are as follows: 2 of 71 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street]
Temporal Representation:	Data was collected over the time period 1/8/2004-12/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18995
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]

Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18998
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18994
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	19015
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18996
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18997
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309-SRITA-31 - Santa Rita at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52213
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52340
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52067

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52300
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52337
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37128, pH **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	52266

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37197 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One of the 9 samples exceed the Aquatic Life water quality objective but none of the samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 9 samples exceed the Aquatic Life water quality objective but none of the samples exceed the Agricultural Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37197, Copper **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	17462
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries). Table 3-5 (page III-11) states, the maximum concentration for copper in aquatic life habitats is 0.03 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In Table 3-5 of the Basin Plan (page III-11), the maximum concentration for copper in aquatic life habitats is 0.03 mg/L.
Guideline Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue]
Temporal Representation:	Data was collected over the time period 11/29/2005-1/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams

Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37197, Copper **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	17502
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for irrigation supply.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for copper for irrigation supply is 0.2 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue].
Temporal Representation:	Data was collected over the time period 11/29/2005-1/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37197, Copper **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	17461
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries). Table 3-5 (page III-11) states, the maximum concentration for copper in aquatic life habitats is 0.03 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-32 - Santa Rita Creek at Bellizona, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue]
Temporal Representation:	Data was collected over the time period 11/29/2005-1/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38730 Region 3

Santa Rita Creek (Monterey County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize water samples. Three water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). One of the three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial

uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38730, Toxicity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	24376
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38730, Toxicity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	24375
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park].
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38730, Toxicity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	24298
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38730, Toxicity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	24307
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/15/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38730, Toxicity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	24305
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38730, Toxicity **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	24306
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 1 monitoring site [309RTA - Santa Rita Creek at Santa Rita Park]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/15/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38016** **Region 3**

Santa Rita Creek (Monterey County)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. None of the 9 samples exceed the water quality objectives for Aquatic Life or Agricultural Supply beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 9 samples exceed the water quality objectives for Aquatic Life or Agricultural Supply beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38016, Zinc **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18598
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries). Table 3-5 (page III-11) states, the maximum concentration for zinc in aquatic life habitats is 0.2 mg/L
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona]
Temporal Representation:	Data was collected over the time period 11/29/2005-1/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38016, Zinc **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18599
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries). Table 3-5 (page III-11) states, the maximum concentration for zinc in aquatic life habitats is 0.2 mg/L
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-35 - Santa Rita Creek at Van Buren Avenue, 309-SRITA-32 - Santa Rita Creek at Bellizona]
Temporal Representation:	Data was collected over the time period 11/29/2005-1/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38016, Zinc **Region 3**

Santa Rita Creek (Monterey County)

LOE ID:	18597
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Santa Rita Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for irrigation supply.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for zinc for irrigation is 2.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Rita Creek (Monterey County) was collected at 4 monitoring sites [309-SRITA-36 - Santa Rita Creek at North Main St. and E. Bolivar Street, 309-SRITA-34 - Santa Rita Creek at Russell Road, 309-SRITA-35 - Santa Rita Creek
Temporal Representation:	Data was collected over the time period 11/29/2005-1/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Quail Creek**
Water Body ID: **CAR3091900020011227140647**
Water Body Type: **River & Stream**

DECISION ID **44475** **Region 3**
Quail Creek

Pollutant: **Temperature, water**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 112 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty of the 112 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44475, Temperature, water **Region 3**
Quail Creek

LOE ID: 14693

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 7 of 25 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44475, Temperature, water **Region 3**

Quail Creek

LOE ID:	12685
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44475, Temperature, water **Region 3**

Quail Creek

LOE ID:	12667
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 7/7/1999-10/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44475, Temperature, water **Region 3**

Quail Creek

LOE ID:	48621
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 11 of 62 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44475, Temperature, water **Region 3**

Quail Creek

LOE ID:	51380

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40802**	**Region 3**
Quail Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Ninety-one of the 101 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 88 of the 101 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ninety-one of the 101 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 88 of the 101 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. These exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40802, Turbidity **Region 3**

Quail Creek

LOE ID:	51454
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40802, Turbidity — Region 3

Quail Creek

LOE ID:	51379
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40802, Turbidity — Region 3

Quail Creek

LOE ID:	12686
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40802, Turbidity **Region 3**

Quail Creek

LOE ID:	14678
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 26 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40802, Turbidity **Region 3**

Quail Creek

LOE ID:	14692
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 26 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40802, Turbidity **Region 3**

Quail Creek

LOE ID:	12687
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40802, Turbidity **Region 3**

Quail Creek

LOE ID:	48620

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	49
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 49 of 61 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40802, Turbidity **Region 3**

Quail Creek

LOE ID:	48619
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	52
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 52 of 61 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **40541** **Region 3**

Quail Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

The pollutant name was changed from to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Twelve lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which 12 of the 65 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 110 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Twelve of the 65 samples exceed the water quality objective for unionized ammonia and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed nutrient TMDL has been approved by USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	51357
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	51419
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	51381
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	9596
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road].
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	9597
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road].
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40541, Ammonia — Region 3

Quail Creek

LOE ID:	14481
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40541, Ammonia — Region 3

Quail Creek

LOE ID:	14626
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	23
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 6 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	14640
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 6 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	48597
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 4 of 28 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 3/22/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	48596
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 4 of 28 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 3/22/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	48595
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	64
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 64 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QUI - Quail Creek at Highway 101, East side, 309QCW - Quail Creek west side Highway 101, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40541, Ammonia **Region 3**

Quail Creek

LOE ID:	9562
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40822**	**Region 3**
Quail Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Twenty-four of twenty-four water samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Zero of three samples exceeded the USEPA drinking water health advisory. For the municipal and domestic supply beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twenty-four of twenty-four water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 40822, Chlorpyrifos **Region 3**

Quail Creek

LOE ID:	15184
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40822, Chlorpyrifos **Region 3**

Quail Creek

LOE ID:	15168
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40822, Chlorpyrifos **Region 3**

Quail Creek

LOE ID:	48600
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at Highway 101, East side]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40822, Chlorpyrifos **Region 3**

Quail Creek

LOE ID:	48601
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at Highway 101, East side]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40822, Chlorpyrifos **Region 3**

Quail Creek

LOE ID:	15115
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Quail Creek to determine beneficial use support and results are as follows: 19 of 19 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI_DPR - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40822, Chlorpyrifos **Region 3**

Quail Creek

LOE ID:	15114
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Quail Creek to determine beneficial use support and results are as follows: 19 of 19 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI_DPR - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40822, Chlorpyrifos **Region 3**

Quail Creek

LOE ID:	56920
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **40823** **Region 3**

Quail Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. The decision for the 2010 303(d) list used 0.16 ug/L (Siepmann and Finlayson, 2000) as the evaluation guideline and resulted in eleven out of twenty-one samples exceeding this guideline. The evaluation guideline now being used is 0.1 ug/L (Finlayson, 2004). Using 0.1 ug/L as the evaluation guideline results in fifteen out of twenty-one sampling exceeding the evaluation guideline. Additionally, three more samples were collecting after the 2010 303(d) listing cycle. Three of three samples exceeded the evaluation guideline. In total, using the evaluation guideline of 0.1 ug/L (Finlayson, 2004), eighteen out of twenty-four samples exceed the evaluation guideline set to protect for aquatic life beneficial uses. One of the three samples exceeded the USEPA drinking water health advisory. For the municipal beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eighteen out of twenty-four samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 40823, Diazinon **Region 3**

Quail Creek

LOE ID:	56947
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40823, Diazinon **Region 3**

Quail Creek

LOE ID:	15185
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40823, Diazinon **Region 3**

Quail Creek

LOE ID:	15152
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Quail Creek to determine beneficial use support and results are as follows: 9 of 19 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI_DPR - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40823, Diazinon **Region 3**

Quail Creek

LOE ID:	15153
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Quail Creek to determine beneficial use support and results are as follows: 9 of 19 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI_DPR - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard

	Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40823, Diazinon **Region 3**

Quail Creek

LOE ID:	48603
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at Highway 101, East side]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40823, Diazinon **Region 3**

Quail Creek

LOE ID:	48602
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon, Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at Highway 101, East side]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40823, Diazinon **Region 3**

Quail Creek

LOE ID:	15186
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40709**	**Region 3**
Quail Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for the non-contact recreation for Escherichia coli (E.coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'.

Three lines of evidence are available in the administrative record to assess this pollutant. Ten of 14 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 12 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 14 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40709, Escherichia coli (E. coli) **Region 3**

Quail Creek

LOE ID:	10817
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40709, Escherichia coli (E. coli) **Region 3**

Quail Creek

LOE ID:	10816
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40709, Escherichia coli (E. coli) **Region 3**

Quail Creek

LOE ID:	51400
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40826**	**Region 3**
Quail Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for the non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'.

Four lines of evidence are available in the administrative record to assess this pollutant. Sixteen of 22 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 4 of 22 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved

by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixteen of the 22 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40826, Fecal Coliform **Region 3**

Quail Creek

LOE ID:	51417
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40826, Fecal Coliform — Region 3

Quail Creek

LOE ID:	51399
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40826, Fecal Coliform — Region 3

Quail Creek

LOE ID:	10815
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	4

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 4 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40826, Fecal Coliform **Region 3**

Quail Creek

LOE ID:	10814
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 15 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**33776**	**Region 3**
Quail Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Seventeen lines of evidence are available in the administrative record to assess this pollutant. Thirty-one of the 43 nitrate samples and 64 of the 80 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Thirty-seven of the 43 nitrate samples and 61 of the 63 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. In addition, the following supporting evidence of eutrophication is summarized: 1) Dissolved oxygen for this water body ranged from 2.17 mg/L to 14.52 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L, and occasionally the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Floating mats ranged up to 100 % cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3) Water column chlorophyll a concentration ranged up to 95 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 3.08 mg/L to 4.51 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). 5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at

sites from 69 g/m2 ash-free dry weight (AFDW) to 93 g/m2 AFDW, exceeding the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the Warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from172 mg/m2 to 234 mg/m2, exceeding the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-one of the 43 nitrate samples and 64 of the 80 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Thirty-seven of the 43 nitrate samples and 61 of the 63 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy. In addition, there is evidence of eutrophication in this water segment.
4. The Lower Salinas River Nutrient TMDL has been approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the Section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	9595
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 11 of 20 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed

	in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	48604
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 13 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QUI - Quail Creek at Highway 101, East side, 309UQA - Quail Creek at Old Stage Rd, 309QCW - Quail Creek west side Highway 101, 309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 10/30/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	48605
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 13 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QUI - Quail Creek at Highway 101, East side, 309UQA - Quail Creek at Old Stage Rd, 309QCW - Quail Creek west side Highway 101, 309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 10/30/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	48606
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 13 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QUI - Quail Creek at Highway 101, East side, 309UQA - Quail Creek at Old Stage Rd, 309QCW - Quail Creek west side Highway 101, 309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 10/30/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	48607
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	60

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 60 of 61 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QUI - Quail Creek at Highway 101, East side, 309QCW - Quail Creek west side Highway 101, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	48608
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	61
Number of Exceedances:	52
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 52 of 61 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QUI - Quail Creek at Highway 101, East side, 309QCW - Quail Creek west side Highway 101, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	48609
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	60
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 60 of 61 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QUI - Quail Creek at Highway 101, East side, 309QCW - Quail Creek west side Highway 101,

	309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	28106
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). All 7 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 4/14/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	28105
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). All 7 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 4/14/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	28116
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Salinas). Sixteen of the 20 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. CCAMP has conducted monitoring in this watershed rotation area in both 1999 and 2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	28117
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Salinas). Sixteen of the 20 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. CCAMP has conducted monitoring in this watershed rotation area in both 1999 and 2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	15230
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring

	(R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 7 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 4/14/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	14467
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 12 of 17 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.

Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	51435
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	51397
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	51396
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	51359
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	51360
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-

	Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33776, Nitrate **Region 3**

Quail Creek

LOE ID:	51436
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40879	Region 3
Quail Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.2 of the Listing Policy. Under 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Twenty-six of the 109 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and five of the 109 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-six of the 109 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and five of the 109 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on October 13, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved	**Region 3**
Quail Creek	

LOE ID:	51438
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	51376
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	51437
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	51377

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	48610
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 12 of 59 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	12671
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 5 of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	48612
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 20 of 59 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	48613
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	59

Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 20 of 59 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	48611
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW -

	Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	12670
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 5 of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	12669
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	12651
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Quail Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 7/7/1999-10/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	12650
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Quail Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 7/7/1999-10/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	12649
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 7/7/1999-10/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	12668

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 2 monitoring sites [309QUA-Quail Creek at Potter Road, 309UQA-Quail Creek at Old Stage Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	12648
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling

	(DO) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 7/7/1999-10/1/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	14658
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 18 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	14643
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 12 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	14657
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 18 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40879, Oxygen, Dissolved **Region 3**

Quail Creek

LOE ID:	14656
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 4 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41597**	**Region 3**
Quail Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Three LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and six additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in sediment samples. Eight of the eight sediment samples resulted in a

significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Thirteen LOEs summarize water samples. Nine water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and sixteen water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-five total samples are available to assess toxic effects in water samples. Twenty-four of the twenty-five water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 8 sediment samples and 24 of the 25 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by USEPA on October 7, 2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	24465
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	23981
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	23964
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and

	cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	23965
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	26256
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat | Fish Migration | Fish Spawning
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA - Quail Creek at Potter Road (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. CCAMP conduct water toxicity monitoring in both wet and dry season flows and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	none
QAPP Information:	SWAMP QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity — Region 3

Quail Creek

LOE ID:	26255
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA - Quail Creek at Potter Road, (trib. to Salinas R.)].
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. CCAMP staff conduct water toxicity monitoring In both wet and dry seasons and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	None
QAPP Information:	SWAMP QAPP (Puckett, M 2002)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity — Region 3

Quail Creek

LOE ID:	24464
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	24455
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Quail Creek to determine beneficial use support and results are as follows: 6 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	24468
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Quail Creek to determine beneficial use support and results are as

	follows: 0 of 5 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	24454
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Quail Creek to determine beneficial use support and results are as follows: 6 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	24459
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 4/14/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	24467
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Quail Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	24466
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Quail Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	24458
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 4/14/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	56988
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	16
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Sixteen samples were collected to evaluate water toxicity. All 16 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples exhibited significant toxicity to survival of Ceriodaphnia dubia (sixteen samples) and Pimephales promelas (two samples). Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309QCW-Quail Creek West of Hwy 101 at RR Tracks, 309QUA-Quail Creek at Potter Road, 309QUI-Quail Creek east of Hwy. 101, and 309UQA-Quail Creek at Old Stage Road.
Temporal Representation:	The samples were collected from January 2008 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41597, Toxicity **Region 3**

Quail Creek

LOE ID:	56987
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate sediment toxicity. All 6 samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples exhibited significant toxicity to survival and growth of Hyalella azteca. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309QCW-Quail Creek West of Hwy 101 at RR Tracks, 309QUA-Quail Creek at Potter Road, 309QUI Quail Creek, and 309UQA-Quail Creek at Old Stage Road.
Temporal Representation:	The samples were collected in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49245** **Region 3**

Quail Creek

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection, Note the sample count is zero because although nineteen samples were collected however they were all reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the zero samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49245, Bifenthrin **Region 3**

Quail Creek

LOE ID:	57023
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49245, Bifenthrin **Region 3**

Quail Creek

LOE ID:	57024
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 40681 Region 3
Quail Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Three of the 102 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 102 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40681, Chlorophyll-a Region 3
Quail Creek

LOE ID:	51420
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40681, Chlorophyll-a **Region 3**

Quail Creek

LOE ID:	51358
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40681, Chlorophyll-a **Region 3**

Quail Creek

LOE ID:	48598
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40681, Chlorophyll-a **Region 3**

Quail Creek

LOE ID:	9594
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 3 of 18 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40681, Chlorophyll-a **Region 3**

Quail Creek

LOE ID:	48599
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side,

	309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40681, Chlorophyll-a **Region 3**

Quail Creek

LOE ID:	9563
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 3 of 18 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40681, Chlorophyll-a **Region 3**

Quail Creek

LOE ID:	14642
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40681, Chlorophyll-a **Region 3**

Quail Creek

LOE ID:	14641
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	49246	Region 3
Quail Creek		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection, Note the sample count is zero because although nineteen samples were collected however they were all reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the zero samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49246, Cyfluthrin	**Region 3**
Quail Creek	

LOE ID:	56921
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49246, Cyfluthrin **Region 3**

Quail Creek

LOE ID:	56922
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**49247**	**Region 3**
Quail Creek		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection, Note the sample count is zero because although nineteen samples were collected however they were all reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the zero samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49247, Cyhalothrin, Lambda — Region 3

Quail Creek

LOE ID:	56928
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49247, Cyhalothrin, Lambda — Region 3

Quail Creek

LOE ID:	56927
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	49248	Region 3
Quail Creek		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the zero samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection, Note the sample count is zero because although nineteen samples were collected however they were all reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial

uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the zero samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49248, Cypermethrin **Region 3**

Quail Creek

LOE ID:	56935
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek

	- 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49248, Cypermethrin **Region 3**

Quail Creek

LOE ID:	56929
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49251 **Region 3**

Quail Creek

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49251, Demeton **Region 3**

Quail Creek

LOE ID:	56937
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49251, Demeton **Region 3**

Quail Creek

LOE ID:	56944
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49251, Demeton **Region 3**

Quail Creek

LOE ID:	56938
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49251, Demeton **Region 3**

Quail Creek

LOE ID:	56936
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**49252**	**Region 3**
Quail Creek		

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection and zero of the 24 samples exceed the evaluation guideline set to protect the drinking water use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49252, Dichlorvos **Region 3**

Quail Creek

LOE ID:	56949
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49252, Dichlorvos **Region 3**

Quail Creek

LOE ID:	56957
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49252, Dichlorvos **Region 3**

Quail Creek

LOE ID:	56948
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49252, Dichlorvos **Region 3**

Quail Creek

LOE ID:	56956
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs

	Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49252, Dichlorvos **Region 3**

Quail Creek

LOE ID:	56965
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49252, Dichlorvos **Region 3**

Quail Creek

LOE ID:	56964
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49252, Dichlorvos **Region 3**

Quail Creek

LOE ID:	56963
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49252, Dichlorvos **Region 3**

Quail Creek

LOE ID:	56955
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49252, Dichlorvos **Region 3**

Quail Creek

LOE ID:	79671
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)

Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 49254 Region 3

Quail Creek

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the evaluation guideline for Municipal and Domestic Supply use (i.e. drinking water). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49254, Disulfoton Region 3

Quail Creek

LOE ID:	56993
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49254, Disulfoton **Region 3**

Quail Creek

LOE ID:	56991
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49254, Disulfoton **Region 3**

Quail Creek

LOE ID:	56992
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49255** **Region 3**

Quail Creek

Pollutant:	**Dyfonate (Fonofos or Fonophos)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49255, Dyfonate (Fonofos or Fonophos) **Region 3**

Quail Creek

LOE ID:	56994
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.

Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49255, Dyfonate (Fonofos or Fonophos) Region 3

Quail Creek

LOE ID:	56996
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	49256	Region 3
Quail Creek		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49256, Esfenvalerate/Fenvalerate	**Region 3**
Quail Creek	

LOE ID:	56997
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49256, Esfenvalerate/Fenvalerate **Region 3**

Quail Creek

LOE ID:	56998
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).

QAPP Information Reference(s):

DECISION ID	49259	Region 3
Quail Creek		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49259, Ethoprop	**Region 3**
Quail Creek	

LOE ID:	56999
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49259, Ethoprop **Region 3**

Quail Creek

LOE ID:	57000
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49259, Ethoprop **Region 3**

Quail Creek

LOE ID:	57001
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49259, Ethoprop **Region 3**

Quail Creek

LOE ID:	57002
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49259, Ethoprop **Region 3**

Quail Creek

LOE ID:	57003

Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49259, Ethoprop **Region 3**

Quail Creek

LOE ID:	57004
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Ethoprop.

Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**49257**	**Region 3**
Quail Creek		

Pollutant:	**Fenamiphos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Zero of the 19 samples exceed the evaluation guideline used to interpret the water quality objective for Municipal and Domestic Supply use (i.e. drinking water). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49257, Fenamiphos **Region 3**

Quail Creek

LOE ID:	57006
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49257, Fenamiphos **Region 3**

Quail Creek

LOE ID:	57007
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for fenamiphos is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49257, Fenamiphos **Region 3**

Quail Creek

LOE ID:	57005
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5

	ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49261 Region 3
Quail Creek

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the evaluation guideline for Municipal and Domestic Supply use (i.e. drinking water). Zero of the 24 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49261, Methidathion Region 3
Quail Creek

LOE ID:	57020
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49261, Methidathion **Region 3**

Quail Creek

LOE ID:	57021
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49261, Methidathion **Region 3**

Quail Creek

LOE ID:	57022
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]

Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49258 Region 3
Quail Creek

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the evaluation guideline for Municipal and Domestic Supply use (i.e. drinking water). Zero of the 24 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49258, Methyl Parathion Region 3
Quail Creek

LOE ID:	56924
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support

	and results are as follows: 0 of 19 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49258, Methyl Parathion **Region 3**

Quail Creek

LOE ID:	56923
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek

	- 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49258, Methyl Parathion **Region 3**

Quail Creek

LOE ID:	56925
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49258, Methyl Parathion **Region 3**

Quail Creek

LOE ID:	56926
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49258, Methyl Parathion **Region 3**

Quail Creek

LOE ID:	56934
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49258, Methyl Parathion **Region 3**

Quail Creek

LOE ID:	56933
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.

Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49258, Methyl Parathion **Region 3**

Quail Creek

LOE ID:	56932
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49258, Methyl Parathion **Region 3**

Quail Creek

LOE ID:	56931
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49258, Methyl Parathion **Region 3**

Quail Creek

LOE ID:	56930
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 49262 Region 3

Quail Creek

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the evaluation guideline for Municipal and Domestic Supply use (i.e. drinking water). Zero of the 24 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 samples exceed the evaluation guidelins and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49262, Phorate Region 3

Quail Creek

LOE ID:	56977
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49262, Phorate **Region 3**

Quail Creek

LOE ID:	56976
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49262, Phorate **Region 3**

Quail Creek

LOE ID:	56978
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.

Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49262, Phorate **Region 3**

Quail Creek

LOE ID:	56967
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49262, Phorate **Region 3**

Quail Creek

LOE ID:	56962
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49262, Phorate **Region 3**

Quail Creek

LOE ID:	56969
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49262, Phorate **Region 3**

Quail Creek

LOE ID:	56970
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek

	- 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49262, Phorate **Region 3**

Quail Creek

LOE ID:	56971
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49262, Phorate **Region 3**

Quail Creek

LOE ID:	56968
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**40815**	**Region 3**
Quail Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Seven of the 98 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and eight of the 98 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 98 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and eight of the 98 samples exceed the water quality objectives for Drinking Water and Recreation. These not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	51398
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	51378
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	51416
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	51439
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	51418
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	48618
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 5 of 59 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	48614
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 5 of 59 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	14660
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	10836
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	10837
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	14675
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	14676
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	14677
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	10818
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-

	Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	10834
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	10835

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Quail Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUA-Quail Creek at Potter Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	48617
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	59
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 6 of 59 samples exceed the criterion for pH.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	48616
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 6 of 59 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	48615
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Quail Creek to determine beneficial use support and results are as follows: 6 of 59 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 4 monitoring sites [309QCW - Quail Creek west side Highway 101, 309QUI - Quail Creek at Highway 101, East side, 309QUA-Quail Creek at Potter Road, 309UQA - Quail Creek at Old Stage Rd]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40815, pH **Region 3**

Quail Creek

LOE ID:	14659
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Quail Creek to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [309QUI - Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.)]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**49253**	**Region 3**
Quail Creek		

Pollutant:	**Dimethoate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Six of the 24 samples exceed the evaluation guideline for Municipal and Domestic supply use (i.e. drinking water). But, zero of the five samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 24 samples exceed the evaluation guideline for Municipal and Domestic Supply use and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49253, Dimethoate **Region 3**

Quail Creek

LOE ID:	56981
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49253, Dimethoate — Region 3

Quail Creek

LOE ID:	56982
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49253, Dimethoate — Region 3

Quail Creek

LOE ID:	56980
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49253, Dimethoate **Region 3**

Quail Creek

LOE ID:	56975
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs

	Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49253, Dimethoate **Region 3**

Quail Creek

LOE ID:	56974
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49253, Dimethoate **Region 3**

Quail Creek

LOE ID:	56973

Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 6 of 19 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49253, Dimethoate **Region 3**

Quail Creek

LOE ID:	56972
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49253, Dimethoate **Region 3**

Quail Creek

LOE ID:	56966
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49253, Dimethoate **Region 3**

Quail Creek

LOE ID:	56983
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49260** **Region 3**

Quail Creek

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the evaluation guideline for Municipal and Domestic Supply use (i.e. drinking water). Three of the eight samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is eight and although 24 samples were collected, 16

samples are reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the eight samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49260, Malathion **Region 3**

Quail Creek

LOE ID:	57014
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49260, Malathion **Region 3**

Quail Creek

LOE ID:	57012
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49260, Malathion **Region 3**

Quail Creek

LOE ID:	57013
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49260, Malathion **Region 3**

Quail Creek

LOE ID:	57010
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49260, Malathion **Region 3**

Quail Creek

LOE ID:	57008
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49260, Malathion **Region 3**

Quail Creek

LOE ID:	57015

Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected and three of those sample results exceeded the guideline, however the remianing sixteen samples were non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49260, Malathion **Region 3**

Quail Creek

LOE ID:	57011
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49260, Malathion **Region 3**

Quail Creek

LOE ID:	57019
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected and three of those sample results exceeded the guideline, however the remianing sixteen samples were non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]

Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49260, Malathion **Region 3**

Quail Creek

LOE ID:	57009
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Quail Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49250** **Region 3**

Quail Creek

Pollutant:	**Permethrin, total**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seven of the seven samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is seven and although nineteen samples were collected, 12 samples are reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the seven samples exceed the evaluation guidelines and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49250, Permethrin, total **Region 3**

Quail Creek

LOE ID:	56952
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected and seven of those sample results exceeded the guideline, however the remianing twelve samples were non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49250, Permethrin, total **Region 3**

Quail Creek

LOE ID:	56953
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Quail Creek to determine beneficial use support. Nineteen samples were collected and seven of those sample results exceeded the guideline, however the remaining twelve samples were non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides.

	Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Quail Creek was collected at 1 monitoring site [Quail Creek - 309QUI]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Gabilan Creek**
Water Body ID: **CAR3091900019990304092345**
Water Body Type: **River & Stream**

DECISION ID **40095** **Region 3**
Gabilan Creek

Pollutant: **Turbidity**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Twenty-six of the 27 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-six of the 27 samples exceed the warm freshwater habitat evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40095, Turbidity **Region 3**
Gabilan Creek

LOE ID: 50492

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40095, Turbidity **Region 3**

Gabilan Creek

LOE ID:	54278
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Shoup, D.E. and D.H. Wahl (2009) states that largemouth bass had more difficulty in capturing rapidly moving fish prey at 40 NTU and the overall foraging rate was much lower.

Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40095, Turbidity **Region 3**

Gabilan Creek

LOE ID:	12983
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40095, Turbidity **Region 3**

Gabilan Creek

LOE ID:	14639
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 16 of 16 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40095, Turbidity **Region 3**

Gabilan Creek

LOE ID:	48468
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**40339**	**Region 3**
Gabilan Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Thirty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Fifty-six of the 228 samples exceed the water quality objective for Agricultural Supply, 88 of the 228 samples exceeded the water quality objectives for Drinking Water and Recreation. However, 36 of the 228 samples exceed the water quality objective Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-six of the 228 samples exceed the water quality objective for Agricultural Supply, 88 of the 228 samples exceeded the water quality objectives for Drinking Water and Recreation. Each of these

exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	17413
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	198
Number of Exceedances:	88
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 88 of 198 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	10868
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	10867
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	10869
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	10870
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	10886

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	14637
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are

	as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	48452
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	48453
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	48454
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	48455
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	48456
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	19160
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	19161
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	19179
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	19162
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	19178
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	17410
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	198
Number of Exceedances:	56
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 56 of 198 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	17411
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	198
Number of Exceedances:	88
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 88 of 198 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	17412
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	198
Number of Exceedances:	88
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 88 of 198 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	14620
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	14621
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	14622
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	17414
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	198
Number of Exceedances:	34

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 34 of 198 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	14636
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	54270
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	54272
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	54273
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	54269
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	54271
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	50491
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	50432
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	50451
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	50449
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40339, pH **Region 3**

Gabilan Creek

LOE ID:	50281
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40319** **Region 3**

Gabilan Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients

TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eleven lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Five LOEs summarize unionized ammonia data in which 3 of the 22 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Five LOEs summarize total ammonia data and zero of the 230 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 22 samples exceed the Basin Plan general objective for unionized ammonia and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	17834
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	198
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium

	(R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 198 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	48282
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/19/2010-2/23/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	14288
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	9505

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-5/23/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	14604
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are

	as follows: 3 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 3/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	9544
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	48554
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	50429
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	50469
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to

	determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	54262
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2011 edition of the drinking water standards and health advisories. (EPA 822-R-06-013, 2011).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan

	Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40319, Ammonia **Region 3**

Gabilan Creek

LOE ID:	54258
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **40216** **Region 3**

Gabilan Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Illegal dumping | Transient encampments | Urban Runoff/Storm Sewers

TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Eleven of the 13 samples exceed the water quality objective for contact recreation (i.e. swimming) and 1 of the 13 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 13 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40216, Fecal Coliform **Region 3**

Gabilan Creek

LOE ID:	50433
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40216, Fecal Coliform **Region 3**

Gabilan Creek

LOE ID:	50450
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40216, Fecal Coliform **Region 3**

Gabilan Creek

LOE ID:	10850
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40216, Fecal Coliform **Region 3**

Gabilan Creek

LOE ID:	10849
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	10

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40216, Fecal Coliform **Region 3**

Gabilan Creek

LOE ID:	3948
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	33631	Region 3
Gabilan Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 340 nitrate samples exceed the water quality objective for the Agricultural Supply beneficial use. Forty-three of the 340 nitrate samples and eight of the 14 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. One hundred thirty-four of the 340 nitrate samples and four of the 4 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 4.94mg/L to 14.38 mg/L, at times exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. In addition, this waterbody at times exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). However, the frequency of exceedance is low.
2) Water column chlorophyll a concentration peaked at 50 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 5.62 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 132 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 239 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-three of the 340 nitrate samples and eight of the 14 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. One hundred thirty-four of the 340 nitrate samples and four of the 4 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.. 4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	14287
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-10/25/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	28140
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	206
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Monterey Area Research Consortium (R3_MARC)
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	28141
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	9546
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	9547
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	48433
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	48434
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	28113

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Salinas (Salinas)
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year, in both 1999 and in 2006. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	28155
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	111

Number of Exceedances:	80
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 6 monitoring sites [Herbert Rd, Crazy Horse Rd, Old Stage Rd, Natividad Rd, Veterans Park Bridge, and Boronda Rd]
Temporal Representation:	Data was collected over the time period 10/11/2000-5/23/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	28102
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). Five of the 6 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-10/25/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	18289
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	18290
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	17743
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	206
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 206 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	17744
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	206
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as

	follows: 2 of 206 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	14355
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 7 of 9 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water

Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 3/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	13713
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	111
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gabilan Creek to determine beneficial use support and results are as follows: 12 of 111 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 6 monitoring sites [Herbert Rd, Crazy Horse Rd, Old Stage Rd, Natividad Rd, Veterans Park Bridge, Boronda Rd]
Temporal Representation:	Data was collected over the time period 10/11/2000-5/23/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	13714

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	111
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gabilan Creek to determine beneficial use support and results are as follows: 27 of 111 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 6 monitoring sites [Herbert Rd, Crazy Horse Rd, Old Stage Rd, Natividad Rd, Veterans Park Bridge, Boronda Rd]
Temporal Representation:	Data was collected over the time period 10/11/2000-5/23/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	14286
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-10/25/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	50471
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	50488
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]

Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	50278
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	50431

Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	50430
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33631, Nitrate **Region 3**

Gabilan Creek

LOE ID:	54265
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (California Code of Regulation, Title 22, Division 4, Chapter 15, Section 64431, Table 64431-A).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **41908** **Region 3**

Gabilan Creek

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	01/13/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. Five sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and zero additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in sediment samples. Four of the five sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Six LOEs summarize water samples. Four water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and two additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, six total samples are available to assess toxic effects in water samples. Six of the six water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 5 sediment samples and 6 of the 6 water samples exceeded the water quality objective for aquatic life uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by USEPA.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41908, Toxicity **Region 3**

Gabilan Creek

LOE ID: 54277

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. Both of the samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The sample from 2/21/08 exhibited significant toxicity to Ceriodaphnia dubia and the sample from 1/19/10 exhibited significant toxicity to Ceriodaphnia dubia and Pimephales promelas. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309GAB-Gabilan Creek at Independence Road and East Boranda Road.
Temporal Representation:	The samples were collected from Febuary 2008 to January 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41908, Toxicity **Region 3**

Gabilan Creek

LOE ID:	24209
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 3/22/2005-2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41908, Toxicity **Region 3**

Gabilan Creek

LOE ID:	24065
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Gabilan Creek to determine beneficial use support and results are

	as follows: 4 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road].
Temporal Representation:	Data was collected over the time period 3/22/2005-9/27/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41908, Toxicity **Region 3**

Gabilan Creek

LOE ID:	24199
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 3/22/2005-2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41908, Toxicity **Region 3**

Gabilan Creek

LOE ID:	24067
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 4/13/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41908, Toxicity **Region 3**

Gabilan Creek

LOE ID:	24197
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Gabilan Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [309SG1 - Gabilan Creek at Old Stage Road, 309SG2 - Gabilan Creek at Boranda, 309SG3 - Gabilan Creek at Independence and Lexington Dr.]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	**40168**	**Region 3**
Gabilan Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 10 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 10 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40168, Boron	**Region 3**
Gabilan Creek	

LOE ID:	9504
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 5/10/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40168, Boron **Region 3**

Gabilan Creek

LOE ID:	50563
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47305**	**Region 3**
Gabilan Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample exceed the site specific water quality objective. Although this objective is set for the annual mean, not the single sample maximum, the single sample and the annual mean are the same. Therefore, the single annual mean does exceed the site specific water quality objective. This sample size (as annual means) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. single annual mean does exceed the site specific water quality objective but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47305, Chloride **Region 3**

Gabilan Creek

LOE ID:	50452
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40126** **Region 3**

Gabilan Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Two of the 32 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 32 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40126, Chlorophyll-a **Region 3**

Gabilan Creek

LOE ID:	50470
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40126, Chlorophyll-a **Region 3**

Gabilan Creek

LOE ID:	54263
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A ? Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40126, Chlorophyll-a **Region 3**

Gabilan Creek

LOE ID:	9545
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40126, Chlorophyll-a — Region 3

Gabilan Creek

LOE ID:	48283
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40126, Chlorophyll-a — Region 3

Gabilan Creek

LOE ID:	14605
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40201**	**Region 3**
Gabilan Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 11 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 11 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40201, Escherichia coli (E. coli) **Region 3**

Gabilan Creek

LOE ID:	10866
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40201, Escherichia coli (E. coli) **Region 3**

Gabilan Creek

LOE ID:	10852
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40201, Escherichia coli (E. coli) **Region 3**

Gabilan Creek

LOE ID:	18478
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40201, Escherichia coli (E. coli) **Region 3**

Gabilan Creek

LOE ID:	18479
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40201, Escherichia coli (E. coli) **Region 3**

Gabilan Creek

LOE ID:	50448
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47308	Region 3
Gabilan Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47308, Nitrogen, Nitrite	**Region 3**
Gabilan Creek	

LOE ID:	50280
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40140**	**Region 3**
Gabilan Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seventeen lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Two of the 233 samples exceeded the WarmFreshwater Habitat water quality objective for dissolved oxygen. Zero of 5 samples (only the most recent data are compared to this water quality objective) exceed the fish spawning water quality objective for dissolved oxygen. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats and Spawning Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 233 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and 0 of the 5 samples exceeded the water quality objective for Spawning Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved — Region 3

Gabilan Creek

LOE ID:	50490
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved — Region 3

Gabilan Creek

LOE ID:	50468
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the

	criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	50489
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	54264
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	54267
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	54268
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	48436
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	48435
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the

	criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	48451
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	18101
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	17877
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	196

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 196 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-HEB - Gabilan Creek at Hebert Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	14606
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	12981
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 7/7/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	14619
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Gabilan Creek to determine beneficial use support and results are as follows: 9 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	12980
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 7/7/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	12979
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40140, Oxygen, Dissolved **Region 3**

Gabilan Creek

LOE ID:	12964
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	47303	Region 3
Gabilan Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample exceed the sites specific water quality objective for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceed the sites specific water quality objective for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47303, Sodium	**Region 3**
Gabilan Creek	

LOE ID:	50467
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Sodium.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 50 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40187**	**Region 3**
Gabilan Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Eight lines of evidence are available in the administrative record to assess this pollutant. Eight of the 390 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 390 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40187, Specific Conductivity — Region 3

Gabilan Creek

LOE ID:	50564
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40187, Specific Conductivity — Region 3

Gabilan Creek

LOE ID:	54274
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [Gabilan Creek - 309GAB]
Temporal Representation:	Data was collected on a single day 2/22/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40187, Specific Conductivity **Region 3**

Gabilan Creek

LOE ID:	17664
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309-GABIL-31 - Gabilan Creek at Independence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40187, Specific Conductivity **Region 3**

Gabilan Creek

LOE ID:	17905
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 2 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd.]
Temporal Representation:	Data was collected over the time period 8/24/2004-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40187, Specific Conductivity **Region 3**

Gabilan Creek

LOE ID:	13831
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	168
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 168 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 6 monitoring sites [Old Stage Rd, Crazy Horse Rd, Veterans Park Bridge, Herbert Rd, Natividad Rd, Boronda Rd]
Temporal Representation:	Data was collected over the time period 4/13/2000-2/19/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40187, Specific Conductivity **Region 3**

Gabilan Creek

LOE ID:	17527
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	201
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Gabilan Creek to determine beneficial use support and results are as follows: 2 of 201 samples exceed the criterion for Conductivity(Us).

Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 4 monitoring sites [GA-CHR - Gabilan Creek at Crazy Horse Rd., GA-HEB - Gabilan Creek at Hebert Rd., GA-OSC - Gabilan Creek at Old Stage Coach Rd., GA-129]
Temporal Representation:	Data was collected over the time period 10/4/2000-9/21/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40187, Specific Conductivity **Region 3**

Gabilan Creek

LOE ID:	48284
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40187, Specific Conductivity **Region 3**

Gabilan Creek

LOE ID:	10851
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	47306	Region 3
Gabilan Creek		

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 4 sample exceed the site specific water quality objective. However, this objective is set for the annual mean, not the single sample maximum. Four annual means are calculated and one of the four annual mean values exceed the site specific objective. This sample size (as annual means) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the four annual mean values exceed the site specific objective but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47306, Total Dissolved Solids	**Region 3**
Gabilan Creek	

LOE ID:	48285
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. TDS shall not exceed 300 mg/L
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected over the time period 2/22/2008-2/23/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47306, Total Dissolved Solids **Region 3**

Gabilan Creek

LOE ID:	50453
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gabilan Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 300 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 1 monitoring site [309GAB-Gabilan Creek at Independence Road and East Boranda Road]
Temporal Representation:	Data was collected on a single day 1/8/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	40127	Region 3
Gabilan Creek		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40127, Dieldrin	**Region 3**
Gabilan Creek	

LOE ID:	19260
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [309SG3 - Gabilan Creek at Independence and Lexington Dr., 309SG2 - Gabilan Creek at Boranda, 309SG1 - Gabilan Creek at Old Stage Road]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	**40334**	**Region 3**
Gabilan Creek		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

	3. None of the 3 samples exceed the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40334, Endrin **Region 3**

Gabilan Creek

LOE ID:	19525
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Gabilan Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gabilan Creek was collected at 3 monitoring sites [309SG3 - Gabilan Creek at Independence and Lexington Dr., 309SG2 - Gabilan Creek at Boranda, 309SG1 - Gabilan Creek at Old Stage Road]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Lorenzo Creek (Monterey County)**
Water Body ID: **CAR3091800020020103133204**
Water Body Type: **River & Stream**

DECISION ID **32642** **Region 3**
San Lorenzo Creek (Monterey County)

Pollutant: **Boron**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. All 25 samples exceed the water quality objective for agricultural uses. However, the water bearing formations in the watershed are Purisima and Aromas Red Sands. These formations contain CaCO3 and contribute to naturally elevated salt levels and pH in surface water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All 25 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32642, Boron **Region 3**
San Lorenzo Creek (Monterey County)

LOE ID: 9550

Pollutant: Boron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Agricultural Supply
Number of Samples:	23
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 23 of 23 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 7/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32642, Boron **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51569
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38242 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Grazing-Related Sources | Natural Sources | Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-eight of the 29 samples exceed the water quality objective for agricultural uses. However, the water bearing formations in the watershed are Purisima and Aromas Red Sands. These formations contain CaCO3 and contribute to naturally elevated salt levels and pH in surface water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-eight of the 29 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38242, Chloride **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51580
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38242, Chloride **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	9507
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	27
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 26 of 27 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38171 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. All 25 samples exceed the water quality objective for agricultural uses. However, the water bearing formations in the watershed are Purisima and Aromas Red Sands. These formations contain CaCO3 and contribute to naturally elevated salt levels and pH in surface water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All 25 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38171, Sodium **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	9551
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	23
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 23 of 23 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 7/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38171, Sodium **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51594
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Sodium.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37842 **Region 3**

San Lorenzo Creek (Monterey County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 30 samples exceed the water quality objective for agricultural uses. However, the water bearing formations in the watershed are Purisima and Aromas Red Sands. These formations contain CaCO3 and contribute to naturally elevated salt levels and pH in surface water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of the 30 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37842, Specific Conductivity **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51581
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37842, Specific Conductivity **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10889
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 9 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37842, Specific Conductivity **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10924
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected on a single day 7/28/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37842, Specific Conductivity **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	13868
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [No bridge, Bitterwater Rd (USGS stn), First Street (G15, King City)]
Temporal Representation:	Data was collected over the time period 3/15/2000-3/6/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID 37861 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Eight of the 16 samples exceed the water quality objective for Warm Freshwater Habitat, 9 of the 16 samples exceed the water quality objective for Agricultural Supply, and 11 of the 16 samples exceeded the water quality objectives for Drinking Water and Recreation. However, the water bearing formations in the watershed are Purisima and Aromas Red Sands. These formations contain CaCO3 and contribute to naturally elevated salt levels and pH in surface water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 16 samples exceed the water quality objective for Warm Freshwater Habitat, 9 of the 16 samples exceed the water quality objective for Agricultural Supply, and 11 of the 16 samples exceeded the water quality objectives for Drinking Water and Recreation. All of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10922
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10907
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10906
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 9 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10923
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as

	follows: 8 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10921
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation: Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID: 51544

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 2
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference: Salinas Rotation field data 2007

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference: Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation: Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID: 51572

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51593
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51607
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37861, pH **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51542
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37855 **Region 3**

San Lorenzo Creek (Monterey County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Natural Sources
TMDL Name:	San Lorenzo Creek FIB TMDL
TMDL Project Code:	1069
Date TMDL Approved by USEPA:	11/30/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to

assess listing status.

The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Three lines of evidence are available in the administrative record to assess this pollutant. Nine of 15 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 3 of 13 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 15 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The San Lorenzo Creek Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 11/30/2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37855, Escherichia coli (E. coli) **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10905
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 3 of 13 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37855, Escherichia coli (E. coli) Region 3

San Lorenzo Creek (Monterey County)

LOE ID:	10904
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 9 of 13 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37855, Escherichia coli (E. coli) **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51541
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 32403 **Region 3**

San Lorenzo Creek (Monterey County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Natural Sources
TMDL Name:	San Lorenzo Creek FIB TMDL
TMDL Project Code:	1069

Date TMDL Approved by USEPA:	11/30/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Sixteen of 29 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 5 of 29 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixteen of 29 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 5 of 29 samples exceed the water quality objective for non-contact recreation. Both of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The San Lorenzo Creek Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 11/30/2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met..
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32403, Fecal Coliform **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51608
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200

	MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32403, Fecal Coliform **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51543
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32403, Fecal Coliform **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10887
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 16 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32403, Fecal Coliform **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	10888
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 5 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39699 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two

LOEs summarize unionized ammonia data in which zero of the 16 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 samples exceed the water quality objective for unionized ammonia and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39699, Ammonia **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	9506
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/11/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39699, Ammonia **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	9552
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 12/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39699, Ammonia **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51555
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39699, Ammonia **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51595
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37782 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Four of the 26 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 26 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37782, Chlorophyll-a Region 3

San Lorenzo Creek (Monterey County)

LOE ID:	51556
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37782, Chlorophyll-a **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	9508
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 4 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37856 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 39 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 2 nitrate samples exceed the water quality objectives for the Warm Freshwater Habitat beneficial use. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 2 nitrate/nitrite samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 39 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 2 nitrate samples exceed the water quality objectives for the Warm Freshwater Habitat beneficial use. Zero of the 2 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 2 nitrate/nitrite samples exceed the water quality objective for the Warm Freshwater Habitat beneficial use. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	9548
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	9549
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]

Temporal Representation:	Data was collected over the time period 2/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	13799
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [No bridge, Bitterwater Rd (USGS stn), First Street (G15, King City)]
Temporal Representation:	Data was collected over the time period 1/10/2001-3/6/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	13798

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [No bridge, Bitterwater Rd (USGS stn), First Street (G15, King City)]
Temporal Representation:	Data was collected over the time period 1/10/2001-3/6/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51582
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51583
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51557
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51558
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51605
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37856, Nitrate **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51606
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1

	monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53472 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 11two samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53472, Nitrogen, Nitrite Region 3

San Lorenzo Creek (Monterey County)

LOE ID:	51592
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37829 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Two beneficial uses are assessed. Zero of the 30 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this use is fully supported. Zero of the 2 samples exceeded the water quality objective for dissolved oxygen for Fish Spawning and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for

waters not mentioned by a specific beneficial useÂ…Â" and this water body is designated for Warm Freshwater Habitats and Spawning Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 30 samples exceeded the water quality objective for Warm Freshwater Habitats and zero of the 2 samples exceeded the water quality objective for Fish Spawning. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37829, Oxygen, Dissolved **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51545
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37829, Oxygen, Dissolved **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51571
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37829, Oxygen, Dissolved **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51570
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek

	(Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37829, Oxygen, Dissolved **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	13016
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]

Temporal Representation:	Data was collected over the time period 7/2/1999-7/28/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37829, Oxygen, Dissolved **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	13017
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 7/2/1999-7/28/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37829, Oxygen, Dissolved **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	12998
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37829, Oxygen, Dissolved **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	12999
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data

	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37846 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. However, the evaluationg guideline is specific to steelhead trout and a recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) does not identify San Lorenzo Creek as known habitat. Furthermore, staff are not aware of any other documentation for steelhead in this creek. Therefore this Turbidity Evaluation Guideline is not relevant to this creek. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The Turbidity Evaluation Guideline is not relevant to this waterbody. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because the Turbidity Evaluation Guideline is not relevant to this waterbody.

Line of Evidence (LOE) for Decision ID 37846, Turbidity **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	13001
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 6 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 2 monitoring sites [309LOK-San Lorenzo Creek at First Street in King City, 309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/11/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37846, Turbidity **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	51573
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37691 Region 3

San Lorenzo Creek (Monterey County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Three LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). Zero of the two water samples resulted in a significant toxic effect to one or more test organisms.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples were toxic to test organisms and therefore do not exceed the narrative General Objective for toxicity, set to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37691, Toxicity **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	24425
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca sediment 10-day survival %. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37691, Toxicity **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	24426
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37691, Toxicity **Region 3**

San Lorenzo Creek (Monterey County)

LOE ID:	24415
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for San Lorenzo Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Lorenzo Creek (Monterey County) was collected at 1 monitoring site [309LOR-San Lorenzo Creek at Bitterwater Road east of King City]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Natividad Creek**
Water Body ID: **CAR3091101020050531125140**
Water Body Type: **River & Stream**

DECISION ID **41000** **Region 3**
Natividad Creek

Pollutant: **pH**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five of the 60 samples exceeded the water quality objectives for Drinking Water, Recreation, Cold and Warm Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 60 samples exceeded the water quality objectives for Drinking Water, Recreation, Cold and Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**
Natividad Creek

LOE ID: 48687

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	48701
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	48702
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	48685
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	48686
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 3 of 30 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	14540
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	14557

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	14556
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	22
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 2 of 22 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	14555
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 2 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	14554
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 2 of 22 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	19104
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	19105
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	19106
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	19103
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41000, pH **Region 3**

Natividad Creek

LOE ID:	19122
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40971**	**Region 3**
Natividad Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Sixteen of the 59 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This temperature guideline is relevant to steelhead trout in Natividad Creek and the Becker, G.S and I.J Reining publication, 'Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California' identifies Natividad Creek as having a "Possible run or population" and specifically states the following: "A 2002 DFG letter states, "Natividad Creek is known as a migration route for steelhead trout". Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixteen of the 59 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40971, Temperature, water **Region 3**

Natividad Creek

LOE ID:	48705
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 7 of 33 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40971, Temperature, water **Region 3**

Natividad Creek

LOE ID:	18803
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40971, Temperature, water **Region 3**

Natividad Creek

LOE ID:	14572
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 8 of 22 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan,

	Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41039**	**Region 3**
Natividad Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Fifty-three of the 55 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 47 of the 55 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. The turbidity guideline for Cold Freshwater habitat is specific to steelhead trout and is relevant for Natividad Creek. The Becker, G.S and I.J Reining publication, 'Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California' identifies Natividad Creek as having a "Possible run or population" and specifically states the following: "A 2002 DFG letter states, "Natividad Creek is known as a migration route for steelhead trout". Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-three of the 55 samples exceed the evaluation guideline for Cold Freshwater Habitat and 47 of the 55 samples exceed the Warm Freshwater Habitat evaluation guideline. These exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41039, Turbidity **Region 3**

Natividad Creek

LOE ID:	14571
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 23 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41039, Turbidity **Region 3**

Natividad Creek

LOE ID:	14558
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 23 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41039, Turbidity **Region 3**

Natividad Creek

LOE ID:	48703
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 30 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41039, Turbidity **Region 3**

Natividad Creek

LOE ID:	48704
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 24 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

QAPP Information Reference(s):	All data are flagged as appropriate. Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	41012	Region 3
Natividad Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which five of the 37 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and one of the 57 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 37 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41012, Ammonia — Region 3

Natividad Creek

LOE ID:	48772
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41012, Ammonia — Region 3

Natividad Creek

LOE ID:	48773
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 3 of 17 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41012, Ammonia **Region 3**

Natividad Creek

LOE ID:	48774
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 3 of 17 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41012, Ammonia **Region 3**

Natividad Creek

LOE ID:	14519
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41012, Ammonia **Region 3**

Natividad Creek

LOE ID:	14518
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41012, Ammonia **Region 3**

Natividad Creek

LOE ID:	14466
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 21 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**33924**	**Region 3**
Natividad Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 25 nitrate samples and 40 of the 50 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Twenty-three of the 25 nitrate samples 31 of the 33 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment. 1) Dissolved oxygen for this water body ranged from 1.39 mg/L to 11.20 mg/L, frequently exceeding

(falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L, and at times exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L.
2) Water column chlorophyll a concentration peaked at 4.35 ug/L, never exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 5.41 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 132 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 331 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of the 25 nitrate samples and 40 of the 50 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Twenty-three of the 25 nitrate samples 31 of the 33 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment..
4. The Lower Salinas Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	48668
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 31 of 33 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	48667
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	33
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 28 of 33 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	48665
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 9 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33924, Nitrate — Region 3

Natividad Creek

LOE ID:	48666
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 31 of 33 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33924, Nitrate — Region 3

Natividad Creek

LOE ID:	28143
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	28142
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	14319
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L

	(NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 2/22/2005-8/30/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	13820
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 3 monitoring sites [Boronda Rd, Freedom Blvd., Las Casitas]
Temporal Representation:	Data was collected on a single day 8/1/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance

measurements are not consistently documented in this data set.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	14465
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 12 of 17 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	18396
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	28104
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). All 4 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 2/22/2005-8/30/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	28103
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). All 4 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 2/22/2005-8/30/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	28157
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 3 monitoring sites [Boronda Rd, Freedom Blvd., Las Casitas]
Temporal Representation:	Data was collected on a single day 8/1/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	28156
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 3 monitoring sites [Boronda Rd, Freedom Blvd., Las Casitas]
Temporal Representation:	Data was collected on a single day 8/1/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	48653
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 9 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33924, Nitrate **Region 3**

Natividad Creek

LOE ID:	48652
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 9 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**41137**	**Region 3**
Natividad Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.2 of the Listing Policy. Under 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Twenty-one of the 52 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and five of the 52 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-one of the 52 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	48669
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 10 of 30 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	48683
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 20 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	14536
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	7

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 7 of 22 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	14537
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	14538
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 12 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	14539
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 12 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	48684
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 20 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	48682
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 4 of 30 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	18196
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41137, Oxygen, Dissolved **Region 3**

Natividad Creek

LOE ID:	18195

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41525**	**Region 3**
Natividad Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 4.1 of the Listing Policy.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Six LOEs summarize sediment samples. Five sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in sediment samples. Eight of the eight sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Eight LOEs summarize water samples. Six water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eight additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fourteen total samples are available to assess toxic effects in water samples. Eleven of the fourteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 8 sediment samples and 11 of the 14 water samples exceed the water quality objective for aquatic life uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by USEPA on October 7, 2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23923
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Natividad Creek to determine beneficial use support and results are as follows: 3 of 3

	samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 3 monitoring sites [309SN1 - Natividad Creek at Boranda, 309SN2 - Natividad Creek at Freedom Parkway, 309SN3 - Natividad Creek at Gee Street]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23948
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23911
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Natividad Creek to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23930
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Natividad Creek to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 3 monitoring sites [309SN1 - Natividad Creek at Boranda, 309SN2 - Natividad Creek at Freedom Parkway, 309SN3 - Natividad Creek at Gee Street]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23941
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23921
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Natividad Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 4/13/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23912
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Natividad Creek to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23922
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Natividad Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 4/13/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23939
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	23940
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	55568
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309NAD - Natividad Creek up stream of Salinas Reclamation Canal.
Temporal Representation:	The samples were collected annualy in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	55567
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to evaluate water toxicity. Six of the eight samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Six samples exhibited significant toxicity to survival of Ceriodaphnia dubia (9/29/08, 2/6/09, 8/25/09, 1/19/10, 3/30/10, 2/21/08). Two of those samples also resulted in significant toxic effects to Selenastrum capricornutum growth (2/6/09) and Pimephales promelas (8/25/09).

Data Reference:	Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle. Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309NAD - Natividad Creek up stream of Salinas Reclamation Canal.
Temporal Representation:	The samples were collected from January 2008 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	79236
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location.
Data Reference:	Samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle. Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used

	by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309NAD - Natividad Creek up stream of Salinas Reclamation Canal.
Temporal Representation:	The samples were collected annualy in April 2007, 2008 and 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41525, Toxicity **Region 3**

Natividad Creek

LOE ID:	79237
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eight samples were collected to evaluate water toxicity. Six of the eight samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Six samples exhibited significant toxicity to survival of Ceriodaphnia dubia (9/29/08, 2/6/09, 8/25/09, 1/19/10, 3/30/10, 2/21/08). Two of those samples also resulted in significant toxic effects to Selenastrum capricornutum growth (2/6/09) and Pimephales promelas (8/25/09). Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309NAD - Natividad Creek up stream of Salinas Reclamation Canal.

Temporal Representation:	The samples were collected from January 2008 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 41054 Region 3

Natividad Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 51 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 51 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41054, Chlorophyll-a Region 3

Natividad Creek

LOE ID:	48569
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to

	determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41054, Chlorophyll-a **Region 3**

Natividad Creek

LOE ID:	14520
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41054, Chlorophyll-a **Region 3**

Natividad Creek

LOE ID:	48775
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41054, Chlorophyll-a **Region 3**

Natividad Creek

LOE ID:	14521
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface

	water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41002**	**Region 3**
Natividad Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of four water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). Zero of two samples exceeded the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of four water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41002, Chlorpyrifos **Region 3**

Natividad Creek

LOE ID:	48570
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41002, Chlorpyrifos **Region 3**

Natividad Creek

LOE ID:	48571
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41002, Chlorpyrifos **Region 3**

Natividad Creek

LOE ID:	15146
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41002, Chlorpyrifos **Region 3**

Natividad Creek

LOE ID:	15147
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41002, Chlorpyrifos **Region 3**

Natividad Creek

LOE ID:	55512
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	48606	Region 3
Natividad Creek		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline for aquatic life uses (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48606, Demeton	**Region 3**
Natividad Creek	

LOE ID:	55515
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48606, Demeton **Region 3**

Natividad Creek

LOE ID:	55514
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48606, Demeton **Region 3**

Natividad Creek

LOE ID:	55519
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48606, Demeton **Region 3**

Natividad Creek

LOE ID:	55513
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48608**	**Region 3**
Natividad Creek		

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined by USEPA, Office of Pesticide Programs) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48608, Dichlorvos **Region 3**

Natividad Creek

LOE ID:	55527
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48608, Dichlorvos **Region 3**

Natividad Creek

LOE ID:	55528
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48608, Dichlorvos **Region 3**

Natividad Creek

LOE ID:	55529
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48608, Dichlorvos **Region 3**

Natividad Creek

LOE ID:	55523
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48608, Dichlorvos **Region 3**

Natividad Creek

LOE ID:	55524
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48608, Dichlorvos **Region 3**

Natividad Creek

LOE ID:	79235
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

DECISION ID	48609	Region 3
Natividad Creek		

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline for aquatic life uses (median lethal concentration or LC50, USEPA Office of Pesticide Programs) or the evaluation guideline for drinking water (California Department of Health Services notification level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48609, Dimethoate	**Region 3**
Natividad Creek	

LOE ID:	55538
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use

	support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48609, Dimethoate **Region 3**

Natividad Creek

LOE ID:	55532
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48609, Dimethoate — Region 3

Natividad Creek

LOE ID:	55533
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48609, Dimethoate — Region 3

Natividad Creek

LOE ID:	55539
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48609, Dimethoate **Region 3**

Natividad Creek

LOE ID:	55534
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).

Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48609, Dimethoate **Region 3**

Natividad Creek

LOE ID:	55535
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

DECISION ID	48610	Region 3
Natividad Creek		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48610, Disulfoton	Region 3
Natividad Creek	

LOE ID:	55543
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48610, Disulfoton **Region 3**

Natividad Creek

LOE ID:	55542
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48612** **Region 3**

Natividad Creek

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined by USEPA, Office of Pesticide Programs). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48612, Ethoprop **Region 3**

Natividad Creek

LOE ID:	55553
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48612, Ethoprop **Region 3**

Natividad Creek

LOE ID:	55547
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48612, Ethoprop **Region 3**

Natividad Creek

LOE ID:	55548
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48612, Ethoprop **Region 3**

Natividad Creek

LOE ID:	55549
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

DECISION ID	48613	Region 3
Natividad Creek		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One of the four samples exceed the evaluation guideline for aquatic life uses (Palumbo, A.J., et al., 2012) but zero of the four samples exceeded the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the four samples exceed the evaluation guideline for aquatic life but zero of the four samples exceeded the evaluation guideline for drinking water and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48613, Malathion	**Region 3**
Natividad Creek	

LOE ID:	55471
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48613, Malathion **Region 3**

Natividad Creek

LOE ID:	55557
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.

Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48613, Malathion **Region 3**

Natividad Creek

LOE ID:	55556
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48613, Malathion **Region 3**

Natividad Creek

LOE ID:	55554
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48613, Malathion **Region 3**

Natividad Creek

LOE ID:	55472
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48613, Malathion **Region 3**

Natividad Creek

LOE ID:	55555
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48614** **Region 3**

Natividad Creek

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline for aquatic life uses (Menconi, M., et al., 1992) or the evaluation guideline for drinking water (USEPA drinking water health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48614, Methyl Parathion **Region 3**

Natividad Creek

LOE ID:	55482
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48614, Methyl Parathion **Region 3**

Natividad Creek

LOE ID:	55481
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48614, Methyl Parathion **Region 3**

Natividad Creek

LOE ID:	55480
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48614, Methyl Parathion — Region 3

Natividad Creek

LOE ID:	55479
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48614, Methyl Parathion — Region 3

Natividad Creek

LOE ID:	55474
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48614, Methyl Parathion **Region 3**

Natividad Creek

LOE ID:	55473
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.

Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 48616 Region 3

Natividad Creek

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline for aquatic life uses (median lethal concentration or LC50, USEPA, Office of Pesticide Programs Ecotoxicity Database) or the evaluation guideline for drinking water (National Academy of Sciences health advisory level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48616, Phorate Region 3

Natividad Creek

LOE ID:	55502
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48616, Phorate **Region 3**

Natividad Creek

LOE ID:	55559
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48616, Phorate **Region 3**

Natividad Creek

LOE ID:	55563
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water

	consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48616, Phorate **Region 3**

Natividad Creek

LOE ID:	55562
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48616, Phorate **Region 3**

Natividad Creek

LOE ID:	55560
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48616, Phorate **Region 3**

Natividad Creek

LOE ID:	55561
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**41077**	**Region 3**
Natividad Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The decision for the 2010 303(d) list used 0.16 ug/L (Siepmann and Finlayson, 2000) as the evaluation guideline and resulted in one out of two samples exceeding this guideline. The evaluation guideline now being used is 0.1 ug/L (Finlayson, 2004). Using 0.1 ug/L as the evaluation guideline results in two of two sampling exceeding the evaluation guideline for the 2010 303(d) list. Additionally, two more samples were collecting subsequent to the 2010 listing cycle. Two of two samples exceeded the evaluation guideline. In total, using the evaluation guideline of 0.1 ug/L, three of four samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of four samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41077, Diazinon **Region 3**

Natividad Creek

LOE ID:	15148
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41077, Diazinon **Region 3**

Natividad Creek

LOE ID:	48651
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41077, Diazinon **Region 3**

Natividad Creek

LOE ID:	15149
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek up stream of Salinas Reclamation Canal]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41077, Diazinon **Region 3**

Natividad Creek

LOE ID:	48572
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [309NAD - Natividad Creek]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41077, Diazinon **Region 3**

Natividad Creek

LOE ID:	55522
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 1 monitoring site [

	Natividad Creek - 309NAD]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	40970	Region 3
Natividad Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Illegal dumping | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 and 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Eight of 8 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 8 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of 8 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Loser Salinas River watershed Fecal Indicator Bacteria TMDL has been approved by USEPA. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40970, Escherichia coli (E. coli) — Region 3

Natividad Creek

LOE ID:	18316
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40970, Escherichia coli (E. coli) — Region 3

Natividad Creek

LOE ID:	18317
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Natividad Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 2 monitoring sites [309-UPPER-31 - Upper Natividad Creek, 309-NATIV-31 - Natividad Creek at Las Casitas Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	41078	Region 3
Natividad Creek		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 41078, Dieldrin **Region 3**

Natividad Creek

LOE ID:	19497
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 3 monitoring sites [309SN3 - Natividad Creek at Gee Street, 309SN1 - Natividad Creek at Boranda, 309SN2 - Natividad Creek at Freedom Parkway]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 41078, Dieldrin **Region 3**

Natividad Creek

LOE ID:	19233
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 3 monitoring sites [309SN3 - Natividad Creek at Gee Street, 309SN1 - Natividad Creek at Boranda, 309SN2 - Natividad Creek at Freedom Parkway]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	41025	Region 3
Natividad Creek		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 3 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41025, Endrin **Region 3**

Natividad Creek

LOE ID:	19524
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 3 monitoring sites [309SN3 - Natividad Creek at Gee Street, 309SN1 - Natividad Creek at Boranda, 309SN2 - Natividad Creek at Freedom Parkway]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 41025, Endrin **Region 3**

Natividad Creek

LOE ID:	19523
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Natividad Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Natividad Creek was collected at 3 monitoring sites [309SN3 - Natividad Creek at Gee Street, 309SN1 - Natividad Creek at Boranda, 309SN2 - Natividad Creek at Freedom Parkway]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name:	**Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)**
Water Body ID:	**CAR309110102002100719310 2**
Water Body Type:	**River & Stream**

DECISION ID 34686 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Pesticides**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision for the general category of 'Pesticides' is being replaced by individual decisions for each of the pesticides for which there are data. This water segment is being assessed for a full suite of currently applied pesticides as well as legacy pesticides. Those individual decisions replace this generic decision for pesticides. This decision for pesticides was made prior to 2006 and the supporting data and other information are not held in an assessment database nor are they readily available. The historic administrative record does not include specific data for this decision.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because the supporting data is not available and decisions for individual pesticides will replace this generic decision for pesticides.

Line of Evidence (LOE) for Decision ID 34686, Pesticides Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	3999
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified

Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 40214 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older Lines of Evidence (LOEs) and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Eleven lines of evidence are available in the administrative record to assess this pollutant. When the LOEs for two pollutant names are summed, 67 of the 476 samples exceeded the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.When the LOEs for two pollutant names are summed, 67 of the 476 samples exceeded the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11272
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 6 of 30 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/26/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11007
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 52

	samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13849
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	145
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 9 of 145 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 6 monitoring sites [River Rd (Nr East Garrison), Chualar River Rd, Davis Rd, Blanco Rd, Del Monte Rd, Hwy 68]
Temporal Representation:	Data was collected over the time period 3/15/2000-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11029
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 7/27/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47843
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 4/29/2008 8:33:20 AM-10/28/2009 3:40:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17646
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15271
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	131
Number of Exceedances:	49
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 49 of 131 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 9/25/1995-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51370
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51386
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52828
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Conductivity(ms).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40214, Specific Conductivity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57373
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 43083 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status but under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess pollutant. Two LOEs summarize chlordane concentrations in water samples. Two of the 9 samples exceed the evaluation guideline for drinking water but zero of the nine samples exceed the evaluation guideline for aquatic life protection. Two LOEs summarize chlordane concentrations in sediment samples. The single sediment sample did not exceed the evaluation guideline for aquatic life protection in sediment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 9 samples exceed the evaluation guideline for drinking water and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43083, Chlordane **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57209
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43083, Chlordane **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57210
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43083, Chlordane **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	30003
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Two of the 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for Dieldrin is 0.00014 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43083, Chlordane **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	30004
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. None of the 9 samples exceed the Criteria Continuous Concentration.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for Chlordane is 0.0043 ug/L (USEPA. Federal Register, 40 CFR Part

	131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID 39652 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fifty-four of the 147 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-four of the 147 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39652, Chloride Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9515
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	44
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 12 of 44 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39652, Chloride **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9502
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	60
Number of Exceedances:	21

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 21 of 60 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39652, Chloride **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	26024
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	79
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 20 of 79 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters are listed in table 3-7 of the Water

	Quality Control Plan, Central Coast Region (Section II.A.3, page III-12). The plan states that these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin. Objectives are expressed as a median value and are based on preservation of existing quality ore water quality enhancement believed attainable following control of point sources. The median value for chloride in the Salinas River between Spreckles and Bradley shall not exceed 80 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV-Salinas River at Davis Road and 309SAS Â– Salinas River at Soledad]. These sites are located above Spreckles and within the lower Salinas River reach as defined by the Water Quality Control Plan.
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39652, Chloride **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51368
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 19 of 39 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39652, Chloride **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51369
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 43258 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.6 of the Listing Policy. Under section 4.1, a single line of evidence is necessary to assess listing status. The pollutant name was changed to Â‘DDT (Dichlorodiphenyltrichloroethane)Â’ and the decision was revised to only contain LOEs that summarized DDT (Dichlorodiphenyltrichloroethane) isomer and total DDT (Dichlorodiphenyltrichloroethane) data. LOEs for DDE and DDD isomers were removed from this decision and will be assessed in individual decisions with the appropriate pollutant name. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six LOEs summarize DDT concentrations in water samples. Three of nine samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use (i.e drinking water) and two of the nine samples exceed the evaluation guideline for protection of aquatic life uses. An additional nine samples were collected in 2008 and 2009 but, each of those samples was reported as a non-detect and because the laboratory data reporting limit was above the objective, the results could not be quantified with the level of certainty required by the Listing Policy. Therefore, those LOEs show that zero of the zero samples exceed the evaluation guidelines. Twelve LOEs summarize DDT concentrations in sediment samples. Zero of the six samples exceed the evaluation guidelines for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of nine samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use and two of the nine samples exceed the evaluation guideline for protection of aquatic life uses. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57406
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57421
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57405
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis

	Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57407
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57422
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57257
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57255
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57256
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57243

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57242
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57241
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57229
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57228
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Nine sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criteria for the protection of human health from consumption of organisms only is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57227
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Nine sample result(s) were

	not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57226
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57390
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	30001
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Three of the 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for 4,4'-DDT is 0.00059 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43258, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	30008
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Two of the 9 samples exceed the Criteria Continuous Concentration.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for 4,4'-DDT is 0.001 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID 40271 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must not be associated with toxicity to result in removal of the pollutant from the Section 303(d) list.

Six lines of evidence are available in the administrative record to assess this pollutant. Two LOEs summarize Dieldrin concentrations in water samples. Nine of nine samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use (i.e drinking water) but zero of the nine samples exceed the evaluation guideline for protection of aquatic life uses. An additional seven samples were collected in 2008 and 2009 and are summarized in LOE 57196 but, each of those samples was reported as a non-detect and because the laboratory data reporting limit was above the objective, the results could not be quantified with the level of certainty required by the Listing Policy.

Four LOEs summarize Dieldrin concentrations in sediment samples. Zero of the three sediment samples exceed the evaluation guidelines for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the nine water samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40271, Dieldrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16711
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40271, Dieldrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	30002
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. All 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for Dieldrin is 0.00014 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of

	each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40271, Dieldrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	30007
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. None of the 9 samples exceed the Criteria Continuous Concentration.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for Dieldrin is 0.056 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40271, Dieldrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16710
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40271, Dieldrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57158
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near

	Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40271, Dieldrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57157
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 43483 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must not be associated with toxicity to result in removal of the pollutant from the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Four of nine water samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use (i.e. drinking water). Zero of the nine water samples exceed the evaluation guideline for protection of aquatic life uses. Zero of the one sediment samples exceed the evaluation guidelines for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the nine water samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43483, PCBs (Polychlorinated biphenyls) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57436
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 309DAVxxx (309DAV-Salinas River at Davis Road).
Temporal Representation:	The samples were collected on 6/17/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43483, PCBs (Polychlorinated biphenyls) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	30010
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. None of the 9 samples exceed the Criteria Continuous Concentration.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for PCB's is 0.014 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43483, PCBs (Polychlorinated biphenyls) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	29998
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Four of the 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for PCB's is 0.00017 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID 40860 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Sixty-four of the 138 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-four of the 138 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40860, Sodium Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9533

Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	44
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 16 of 44 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40860, Sodium **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9510
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	51
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 23 of 51

samples exceed the criterion for Sodium.

Data Reference: Final Data File used for assessment: CCAMP Salinas Toxicity data
Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]

Temporal Representation: Data was collected over the time period 4/26/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40860, Sodium **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 51429

Pollutant: Sodium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 4
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Sodium.

Data Reference: Salinas Rotation field data 2007

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium

	exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40860, Sodium **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51428
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 23 of 39 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40720	Region 3
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)		

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Fifty-three of the 156 samples exceed the site specific water quality objective. However; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and the results are as follows: In LOE 57423, zero of the six annual means exceed the site specific water quality objective. In LOE 26025, two of the seven annual means exceed the site specific water quality objective. In LOE 79711, all three annual means exceed the site specific water quality objective. Therefore a total of 16 annual means are available for this assessment and five of the 16 annual means exceed the site specific water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 16 annual means exceed the site specific water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40720, Total Dissolved Solids	Region 3
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	

LOE ID:	79711
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	33

Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CCAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 20 of 33 samples exceed the criterion for Dissolved Solids.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters are listed in table 3-7 of the Water Quality Control Plan, Central Coast Region (Section II.A.3, page III-12). The plan states that these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin. Objectives are expressed as a median value and are based on preservation of existing quality ore water quality enhancement believed attainable following control of point sources. The median value for total dissolved solids (TDS) in the Salinas River between Spreckles and Bradley shall not exceed 600 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River (Lower) - 309DAV
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40720, Total Dissolved Solids **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57423
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Dissolved Solids.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters are listed in table 3-7 of the Water Quality Control Plan, Central Coast Region (Section II.A.3, page III-12). The plan states that these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin. Objectives are expressed as a median value and are based on preservation of existing quality ore water quality enhancement believed attainable following control of point sources. The median value for total dissolved solids (TDS) in the

	Salinas River between Spreckles and Bradley shall not exceed 600 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40720, Total Dissolved Solids **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	26025
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	82
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 31 of 82 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters are listed in table 3-7 of the Water Quality Control Plan, Central Coast Region (Section II.A.3, page III-12). The plan states that these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin. Objectives are expressed as a median value and are based on preservation of existing quality ore water quality enhancement believed attainable following control of point sources. The median value for total dissolved solids (TDS) in the Salinas River between Spreckles and Bradley shall not exceed 600 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV-Salinas River at Davis Road and 309SAS Â– Salinas River at Soledad].
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	40733	Region 3
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. A total of 217 of the 436 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 202 of the 436 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 217 of the 436 samples exceed the evaluation guideline for Cold Freshwater Habitat and 202 of the 436 samples exceed the Warm Freshwater Habitat evaluation guideline. These exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40733, Turbidity	Region 3
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	

LOE ID:	13720
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies

	(R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 17 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [Davis Rd, Del Monte Rd]
Temporal Representation:	Data was collected over the time period 3/13/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13719
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 17 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [

	Davis Rd, Del Monte Rd]
Temporal Representation:	Data was collected over the time period 3/13/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14492
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 26 of 44 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14491
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 26 of 44 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12723
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	14

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 14 of 24 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2000-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12724
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 14 of 24 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2000-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12905
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV-Salinas River at Davis Road , 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12906
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV-Salinas River at Davis Road , 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15313
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	194
Number of Exceedances:	85
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 85 of 194 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15314
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	194
Number of Exceedances:	85
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 85 of 194 samples exceed the criterion for

	Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12889
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 23 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12888
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 23 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51469
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 9 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52965
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as

	follows: 5 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51331
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51470
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52973
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51193
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 14 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57467
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 32 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40733, Turbidity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57454
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 26 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Shoup, D.E. and D.H. Wahl (2009) states that largemouth bass had more difficulty in capturing rapidly moving fish prey at 40 NTU and the overall foraging rate was much lower.
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **40726** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Fifty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. One hundred and sixty-six of the 424 samples exceed the water quality

objectives for Agriculture, 140 of the 424 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 201 of the 424 samples exceed the water quality objectives for Drinking Water and Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred and sixty-six of the 424 samples exceed the water quality objectives for Agriculture, 140 of the 424 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 201 of the 424 samples exceed the water quality objectives for Drinking Water and Recreation. Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51467
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51191
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51412
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 4 samples

	exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51427
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]

Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51468
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51373
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51374
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [

	309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51192
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51411
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52917
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation: Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s): Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 52914

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 4

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference: Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation: Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions: Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s): Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 52950

Pollutant: pH
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52958
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52890
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51410
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57499
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 24 of 40 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57482
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 24 of 40 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57500
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 17 of 40 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57481
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 17 of 40 samples exceed the criterion for pH.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57501
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 21 of 40 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11027
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11008
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	51
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 3 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11009
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11273
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 7 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River

	Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11049
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11010

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	51
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 7 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11011
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	51
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 7 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11030
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River

	Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14762
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	43
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 18 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15195

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	184
Number of Exceedances:	113
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 113 of 184 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14489
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	9

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 9 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14759
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 9 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14760
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 9 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14761
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 18 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15304

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	184
Number of Exceedances:	102
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 102 of 184 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15305
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	184
Number of Exceedances:	123
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 123 of 184 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15320
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	184
Number of Exceedances:	123
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 123 of 184 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation: Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 10990

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 27
Number of Exceedances: 3

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 3 of 27 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: CCAMP Salinas Toxicity data
Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation: Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11048
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11047
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as

	follows: 4 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11046
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [

	309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	10989
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 12 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	10988
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 12 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	10987
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas

	River (Lower) to determine beneficial use support and results are as follows: 3 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47826
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009 3:40:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	19114
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	19113
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	19112
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	19096
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	19095
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47842
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009 3:40:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47829
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009 3:40:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15321
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	184
Number of Exceedances:	102
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 102 of 184 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47827
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009 3:40:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40726, pH **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47828
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009 3:40:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **39577** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Forty of seventy water samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Fifty water samples are not included in the exceedance count because the limit of quantification was greater than the evaluation guideline and the results were non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of thirteen samples exceeded the USEPA drinking water health advisory. Zero of four sediment samples exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007). The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses, however, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. One pore water sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.

For the municipal and domestic supply beneficial use and the sediment samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Forty of seventy water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57252
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57251
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response, CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57225
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57224
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57240
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57239
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57253
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57237
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57238
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]

Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57254
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47717
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15096
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV_DPR - Salinas River at Davis Road, 309SBR_DPR - Salinas River at Del Monte Rd]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15095
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV_DPR - Salinas River at Davis Road, 309SBR_DPR - Salinas River at Del Monte Rd]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18616
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV_DHS - Salinas River at Davis Rd, 309SAC_DHS - Salinas River at Chualar River Rd. bridge, DHS011 - Salinas River at Del Monte Rd]
Temporal Representation:	Data was collected over the time period 1/24/1995-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15202
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18676
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chlorpyrifos Oxygen Analogue.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SAC_DHS - Salinas River at Chualar River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/24/1995-8/1/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18617
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06)

	Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV_DHS - Salinas River at Davis Rd, 309SAC_DHS - Salinas River at Chualar River Rd. bridge, DHS011 - Salinas River at Del Monte Rd]
Temporal Representation:	Data was collected over the time period 1/24/1995-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16233
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16232
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13993
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 38 of 42 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [Davis Rd, Del Monte Rd]
Temporal Representation:	Data was collected over the time period 3/13/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13994

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 38 of 42 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [Davis Rd, Del Monte Rd]
Temporal Representation:	Data was collected over the time period 3/13/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15187
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring

	(R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47737
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39577, Chlorpyrifos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18677
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chlorpyrifos Oxygen Analogue.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SAC_DHS - Salinas River at Chualar River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/24/1995-8/1/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 40455 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Ten out of 101 samples exceed the evaluation guideline (Siepmann and Finlayson, 2000; Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 13 samples exceed the USEPA drinking water health advisory. Zero of four sediment samples exceeded the aquatic life evaluation guideline (Ding et al. 2011). The single sediment samples (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. For the municipal beneficial use and the sediment samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Ten out of 101 samples exceed the evaluation guideline (Siepmann and Finlayson, 2000; Finlayson, 2004) set to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15203
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15133
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV_DPR - Salinas River at Davis Road, 309SBR_DPR - Salinas River at Del Monte Rd]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15134
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV_DPR - Salinas River at Davis Road, 309SBR_DPR - Salinas River at Del Monte Rd]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16654
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

	Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16641
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15204
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47656
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47671
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	48627
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River

	(Lower) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon, Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309SSP - Salinas River (Lower) at Spreckles, 309SAC-Salinas River at Chualar bridge on River Road, 309SAG-Salinas River at Gonzales bridge on River Road]
Temporal Representation:	Data was collected over the time period 2/15/2007-8/25/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	48626
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).

Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309SSP - Salinas River (Lower) at Spreckles, 309SAC-Salinas River at Chualar bridge on River Road, 309SAG-Salinas River at Gonzales bridge on River Road]
Temporal Representation:	Data was collected over the time period 2/15/2007-8/25/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18697
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV_DHS - Salinas River at Davis Rd, 309SAC_DHS - Salinas River at Chualar River Rd. bridge, DHS011 - Salinas River at Del Monte Rd]
Temporal Representation:	Data was collected over the time period 1/24/1995-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18696
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV_DHS - Salinas River at Davis Rd, 309SAC_DHS - Salinas River at Chualar River Rd. bridge, DHS011 - Salinas River at Del Monte Rd]
Temporal Representation:	Data was collected over the time period 1/24/1995-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13905
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	42
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 8 of 42 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [Davis Rd, Del Monte Rd]
Temporal Representation:	Data was collected over the time period 3/13/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13904
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 8 of 42 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [Davis Rd, Del Monte Rd]
Temporal Representation:	Data was collected over the time period 3/13/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57117
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP

	Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57116
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57115
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57104
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho

	Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57103
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57102

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57101
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57309
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57307
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40455, Diazinon **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57308

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40607 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. Twenty-five of 122 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 3 of 94 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-five of 122 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40607, Escherichia coli (E. coli) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51391
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 11 of 38 samples exceed the criterion for E. coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40607, Escherichia coli (E. coli) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51392
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for E. coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40607, Escherichia coli (E. coli) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	10891
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40607, Escherichia coli (E. coli) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11028
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/11/2005-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40607, Escherichia coli (E. coli) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	26045
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP data for two sites in the lower Salinas River to determine beneficial use support and results are as follows: 6 of 31 samples exceed the Evaluation Guideline for E. coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV-Salinas River at Davis Road and 309SAC Â– Salinas River at Chualar River Road].
Temporal Representation:	Data was collected over the time period January 2005-October 2006. Data was collected monthly at on site (309DAV) with the exception of April 2003 - December 2003) and monthly at 309SAC in 2006.

Environmental Conditions:	The Salinas River is dry in the late summer and fall at the 309SAC site.
QAPP Information:	SWAMP QAPP (Puckett, 2002)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40607, Escherichia coli (E. coli) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	26063
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 8 of 34 samples exceed the Evaluation Guideline for E. coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road].
Temporal Representation:	Data was collected over the time period 1/22/2002-5/4/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40607, Escherichia coli (E. coli) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14049
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	34
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Salinas River (Lower) to determine beneficial

	use support and results are as follows: 2 of 34 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-5/4/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40607, Escherichia coli (E. coli) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	26062
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: None of 15 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) to protect for for Water Contact Recreation uses.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge].
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40607, Escherichia coli (E. coli) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18312
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 44640 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping | Urban Runoff/Storm Sewers

TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Thirty-three of 126 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 14 of 150 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-three of 126 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA on 01/31/2012. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44640, Fecal Coliform **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	11271
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 56 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44640, Fecal Coliform **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	10991
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	52
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 52 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44640, Fecal Coliform **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	26046
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	84
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP data for two sites in the lower Salinas River to determine beneficial use support and results are as follows: 18 of 84 samples exceed the Water Contact Recreation water quality objective for fecal coliform.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV-Salinas River at Davis Road and 309SAC Â– Salinas River at Chualar River Road].
Temporal Representation:	Data was collected over the time period February 1999-October 2006. Data was collected monthly at on site (309DAV) with the exception of April 2003 - December 2003) and monthly at 309SAC in 1999 and 2006.
Environmental Conditions:	The Salinas River is dry in the late summer and fall at the 309SAC site.
QAPP Information:	SWAMP QAPP (Puckett, 2002).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44640, Fecal Coliform **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51390

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44640, Fecal Coliform **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51393
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 38 samples exceed the criterion for Coliform, Fecal.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44640, Fecal Coliform **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51375
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 15 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [

	309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44640, Fecal Coliform **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51394
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42934 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Fifty-eight lines of evidence are available in the administrative record to assess this pollutant. Seventy of the 538 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. Two hundred sixteen of the 538 nitrate samples and 24 of the 128 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Four hundred fifty-seven of the 538 nitrate samples and 58 of the 89 nitrate/nitrite samples exceed the Central Coast Region's evaluation guideline for the Cold and Warm Freshwater Habitat beneficial uses.

The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing for Cold Freshwater Habitat. The following is a summary of the supporting evidence:

1) Dissolved oxygen for this water body ranged from 1.66 mg/L to 22.1 mg/L , at some sites often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, at some sites this waterbody often exceeds the upper dissolved oxygen limit established for both Cold and Warm water Beneficial Uses of 13.0 mg/L (NNE Technical Report, 2009).
2) Water column chlorophyll a concentration ranged up to 79.0 ug/L, at some sites often exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 1.3 to 3.84 mg/L. Several sites exceed the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging from 30 to 81 g/m2 AFDW. Several sites exceed the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and one exceeds the warm water screening threshold of 80 grams/m2 (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging from 76 to 203 mg/m2. Several sites exceed the Cold Freshwater Habitat screening threshold of 150 mg/m2, and one exceeds the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy of the 538 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. Seventy of the 538 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. Two hundred sixteen of the 538 nitrate samples and 24 of the 128

	nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Four hundred fifty-seven of the 538 nitrate samples and 58 of the 89 nitrate/nitrite samples exceed the Central Coast Region's evaluation guideline for the Cold and Warm Freshwater Habitat and there is sufficient supporting evidence of eutrophication to support a nitrate listing. 5. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015. 6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52894
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 3/5/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51388

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51387
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 12 of 40 samples exceed the criterion for Nitrate as N.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51465
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51372
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51371
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	33
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 18 of 33 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51356
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51355
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 22 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52857
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 3/5/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52853
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 30 of 31 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52891
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 3/5/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51464
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 29 of 33 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51463
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51449
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51448
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 33 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51434
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 29 of 33 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51433

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51432
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40

Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 33 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57401
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	47
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 47 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (California Code of Regulation, Title 22, Division 4, Chapter 15, Section 64431, Table 64431-A).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57403
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Water Quality Control Plan, Central Coast Region).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 3/25/2009-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57404
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 3/25/2009-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57416
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 3/25/2009-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57417
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 3/25/2009-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52829
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	31
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 8 of 31 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52835
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 30 of 31 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52839
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	31
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 24 of 31 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28164
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Long Term Environmental Assessment Program (R3_CCLEAN)
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental

	Assessment Program data) Water Quality Data Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-5/4/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28132
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	181
Number of Exceedances:	168
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: National Estuarine Research Reserve Monitoring Program (R3_ESNERR). Monitoring was conducted approximately monthly and 168 of 181 samples exceed the evaluation guideline.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006. Monitoring was conducted approximately monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28133
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	181
Number of Exceedances:	168
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: National Estuarine Research Reserve Monitoring Program (R3_ESNERR). Monitoring was conducted approximately monthly and 168 of 181 samples exceed the evaluation guideline.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006. Monitoring was conducted approximately monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28108
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). Five of the 7 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region

	IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 4/14/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28109
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). Five of the 7 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 4/14/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28146
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9503
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 16 of 60 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9531
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	51
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 7 of 51 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9532
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	51
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 14 of 51 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13732
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	107
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 107 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas River (Lower) was collected at 6 monitoring sites [River Rd (Nr East Garrison), Davis Rd, Del Monte Rd, Chualar River Rd, Blanco Rd, Hwy 68]
Temporal Representation: Data was collected over the time period 10/20/2000-6/10/2003.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 13956

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 34
Number of Exceedances: 10

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 10 of 34 samples exceed the criterion for Nitrate as N.
Data Reference: Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road]
Temporal Representation: Data was collected over the time period 1/22/2002-5/4/2005.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: EPA Approved QAPP.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 13957

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	34
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 20 of 34 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-5/4/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9518
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	60
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 3 of 60 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15171
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water

Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/10/2006-11/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15172
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	181
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 25 of 181 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to

	assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15173
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	181
Number of Exceedances:	102
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 102 of 181 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13747
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	107
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 18 of 107 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 6 monitoring sites [River Rd (Nr East Garrison), Davis Rd, Del Monte Rd, Chualar River Rd, Blanco Rd, Hwy 68]
Temporal Representation:	Data was collected over the time period 10/20/2000-6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14482
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14320
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]

Temporal Representation: Data was collected over the time period 4/14/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 14321

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 7
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.

Data Reference: Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data
Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference: Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A
Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]

Temporal Representation: Data was collected over the time period 4/14/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28145
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18450

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18451
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	48631
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 20 of 47 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region

	IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SSP - Salinas River (Lower) at Spreckles, and 309SAC-Salinas River at Chualar bridge on River Road].
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	48639
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 20 of 47 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SSP - Salinas River (Lower) at Spreckles, 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28119
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	43
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Coastal Confluences. Fourty-three of the 51 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road].
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28120
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	43
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Coastal Confluences. Fourty-three of the 51 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road].
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28121
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	49
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Salinas). Fourty-nine of the 60 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1].
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. The Salinas Watershed Rotation Area has been monitored twice, in 1999 and in 2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28122
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	49

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Salinas). Fourty-nine of the 60 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1].
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. The Salinas Watershed Rotation Area has been monitored twice, in 1999 and in 2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28159
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	107
Number of Exceedances:	81
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 6 monitoring sites [River Rd (Nr East Garrison), Davis Rd, Del Monte Rd, Chualar River Rd, Blanco Rd, Hwy 68]
Temporal Representation:	Data was collected over the time period 10/20/2000-6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28160
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	107
Number of Exceedances:	81
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 6 monitoring sites [River Rd (Nr East Garrison), Davis Rd, Del Monte Rd, Chualar River Rd, Blanco Rd, Hwy 68]
Temporal Representation:	Data was collected over the time period 10/20/2000-6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42934, Nitrate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28163
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Long Term Environmental Assessment Program (R3_CCLEAN)
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road]

Temporal Representation:	Data was collected over the time period 1/22/2002-5/4/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID **40766** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Thirty-seven lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Twelve LOEs summarize sediment samples. Five sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and ten additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fifteen total samples are available to assess toxic effects in sediment samples. Two of the fifteen sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Twenty-five LOEs summarize water samples. Eighteen water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twenty water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, thirty-eight total samples are available to assess toxic effects in water samples. Ten of the thirty-eight water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 15 sediment samples and 10 of the 38 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL was approved by USEPA on October 7, 2011.
5.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24564
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 4/14/2005-5/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24538
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24565
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 4/14/2005-5/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24504
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24513
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24520
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24521
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas

	River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24503
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24512
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/15/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24514
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24556
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca 10-day survival %. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SBR-Salinas River at Highway 1].
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24545
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24486
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]

Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24563
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca sediment 10-day survival %. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24485
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	23982

Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	23983
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24527
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24522
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24528
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in

	the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles].
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24505
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/15/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24529
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57451
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant

	compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 309DAVxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79704
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to evaluate sediment toxicity. None of the 5 samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at two lower Salinas River stations (309SAC and 309SSP).
Temporal Representation:	The samples were collected in annualy in April 2007-2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79703
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in the sample collected on 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) station 309DAV-Salinas River at Davis Road.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79702
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity and did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at stations 309DAV - Salinas River at Davis Road.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79701
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 309DAVxxx.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79755
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Five of the 9 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected from station 309SAC resulted in toxic effects to Ceriodaphnia dubia on 1/24/08 and 2/23/08 and to Pimephales promelas on 2/28/08. Samples collected from station 309SSP resulted in toxic effects to Ceriodaphnia dubia on 1/24/08 and 1/20/10 and to Pimephales promelas 2/23/08. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at two station in the lower Salinas River (309SAC and 309SSP).

Temporal Representation:	The samples were collected from January 2008 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79757
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Two of the nine samples exhibited significant toxicity. All nine samples were tested for toxicity to Ceriodaphnia dubia and one of those samples was also tested using Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in the sample collected on 10/14/09. Statistically significant effects on Ceriodaphnia dubia were observed in the sample collected on 10/22/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) station 309DAV-Salinas River at Davis Road.
Temporal Representation:	The samples were collected between January 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79754
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selenastrum capricornutum but had no significant effects to either Ceriodaphnia dubia, or Pimephales promelas. The significant effect to S. capricornutum is not counted as an exceedance here because the conductivity of the sample water was above the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. The conductivity of the sample water from September 22, 2009 was higher than 1500 uS/cm but the significance of the toxic effect for the sample result was not calculated using the high salinity control sample and therefore should not be counted as an exceedance.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. EPA-821-R-02-012 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 309DAVxxx - Salinas River (lower) at Davis Road.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	59003
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Two of the nine samples exhibited significant toxicity. All nine samples were tested for toxicity to Ceriodaphnia dubia and one of those samples was also tested using Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in the sample collected on 10/14/09. Statistically significant effects on Ceriodaphnia dubia were observed in the sample collected on 10/22/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) station 309DAV-Salinas River at Davis Road.
Temporal Representation:	The samples were collected between January 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	59001
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selenastrum capricornutum but had no significant effects to either Ceriodaphnia dubia, or Pimephales promelas. The significant effect to S. capricornutum is not counted as an exceedance here because the conductivity of the sample water was above the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. The conductivity of the sample water from September 22, 2009 was higher than 1500 uS/cm but the significance of the toxic effect for the sample result was not calculated using the high salinity control sample and therefore should not be counted as an exceedance.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. EPA-821-R-02-012 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 309DAVxxx - Salinas River (lower) at Davis Road.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57440
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity and did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation

Spatial Representation:	The sample was collected at stations 309DAV - Salinas River at Davis Road.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57439
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in the sample collected on 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) station 309DAV-Salinas River at Davis Road.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57438
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Five of the 9 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected from station 309SAC resulted in toxic effects to Ceriodaphnia dubia on 1/24/08 and 2/23/08 and to Pimephales promelas on 2/28/08. Samples collected from station 309SSP resulted in toxic effects to Ceriodaphnia dubia on 1/24/08 and 1/20/10 and to Pimephales promelas 2/23/08. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at two station in the lower Salinas River (309SAC and 309SSP).
Temporal Representation:	The samples were collected from January 2008 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40766, Toxicity **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57424
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to evaluate sediment toxicity. None of the 5 samples exhibited significant toxicity.

	The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at two lower Salinas River stations (309SAC and 309SSP).
Temporal Representation:	The samples were collected in annualy in April 2007-2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 49488 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Alachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49488, Alachlor **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57090
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49488, Alachlor **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57089
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49488, Alachlor **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57088
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Alachlor is 0.002 mg/L (Title 22 of the California Code of Regulations).

Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 34754 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty-one lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Twelve LOEs summarize unionized ammonia data in which seven of the 193 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Nine LOEs summarize total ammonia data and zero of the 454 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 193 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 454 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 34754, Ammonia Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57092
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57093
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2011 edition of the drinking water standards and health advisories. (EPA 822-R-06-013, 2011).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57091
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51430
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51334
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51445
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52920
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51352
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51414
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/13/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51413
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13972
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 12/2/2003-5/4/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9511

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14694
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15154
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	172
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 172 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of

	the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14687
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9512
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 49 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road].
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9513
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	49
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 49 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road].
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9499
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries)

	states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1].
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9500
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1].
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9526
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34754, Ammonia **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14483
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40295 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of

the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40295, Anthracene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15828
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40295, Anthracene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15829
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40295, Anthracene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57032
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40295, Anthracene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57031
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40281 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40281, Arsenic **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57033
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40281, Arsenic **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57034
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40281, Arsenic **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15640
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40281, Arsenic **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15641
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	49521	Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Atrazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49521, Atrazine **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57037
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life 50% effect concentration (EC50) for Atrazine is 43 ug/L based on a 14 day toxicity study of Duckweed (Lemna gibba).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49521, Atrazine **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57036
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life 50% effect concentration (EC50) for Atrazine is 43 ug/L based on a 14 day toxicity study of Duckweed (Lemna gibba).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]

Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49521, Atrazine **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57035
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for atrazine is 0.001 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **40310** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40310, Benzo(a)anthracene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57040
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40310, Benzo(a)anthracene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57039
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40310, Benzo(a)anthracene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15707
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40310, Benzo(a)anthracene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15708
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40282 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40282, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15577
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40282, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15576
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40282, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57041
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40282, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57042
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 49576 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment samples exceed the evaluation guideline for aquatic life uses. Zero of the zero water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is zero and although several samples were collected, they are all reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49576, Bifenthrin Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 57045

Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49576, Bifenthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57046
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49576, Bifenthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57047
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 2 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49576, Bifenthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57386
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

	average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49576, Bifenthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57385
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 2 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49576, Bifenthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57164
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for BIFENTHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49576, Bifenthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57163

Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for BIFENTHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49576, Bifenthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57387
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples

	were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 40311 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Seven of the 138 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 138 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40311, Boron **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51367
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40311, Boron **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51351
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40311, Boron **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9501
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	51
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 51 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40311, Boron **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9514
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49578 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Butylate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 45 samples exceed the evaluation guideline for aquatic life uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 45 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49578, Butylate Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57165
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49578, Butylate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57166
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).

Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40297 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40297, Cadmium Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57179

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40297, Cadmium **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57178
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40297, Cadmium **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15426
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]

Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40297, Cadmium **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15425
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49523 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Carbaryl**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49523, Carbaryl **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57181
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49523, Carbaryl **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57180
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for carbaryl is 40 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49523, Carbaryl **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57192
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40298 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 34 samples exceed the evaluation guideline for the Municipal and Domestic Supply use (i.e. drinking water) and zero of nine samples exceed the evaluation guideline for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 34 samples exceed the evaluation guideline for the Municipal and Domestic Supply use (i.e. drinking water) and zero of nine samples exceed the evaluation guideline for protection of aquatic life uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40298, Carbofuran **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57195
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40298, Carbofuran **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57194
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40298, Carbofuran **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57193
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for carbofuran is 18 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40298, Carbofuran **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18600
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for carbofuran.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1 of the Water Quality Control Plan, Central Coast Basin, Municipal and Domestic Supply Objective. Table 3-1 states that Carbofuran shall not exceed 18.0 ug/L (page III-6).

Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SAC_DHS - Salinas River at Chualar River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/24/1995-8/1/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 39623 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 287 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty of the 287 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9517
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	59
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 11 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15240
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14728
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14727
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring

	(R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9534
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 55 samples exceed the criterion for Chlorophyll a.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9516
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	59
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 11 of 59 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12488
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12758
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15241
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	9535
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57211
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A ? Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52812
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57222

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A ? Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52819
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as

	follows: 0 of 11 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52826
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51415
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52927
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51446
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 37 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51447
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39623, Chlorophyll-a **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51431
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 49524 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Chlorothalonil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline drinking water uses. This sample size is insufficient to

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49524, Chlorothalonil **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57223
Pollutant:	Chlorothalonil
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorothalonil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the 2006 USEPA Drinking Water Standards and Health Advisories, the Ten-day Health Advisory for Chlorothalonil is 200 ug/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40142 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40142, Chromium Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57266
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40142, Chromium **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57265
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40142, Chromium **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16084
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40142, Chromium **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16071
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40251** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the

Conclusion:	Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40251, Chrysene (C1-C4) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15965
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40251, Chrysene (C1-C4) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15964
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40251, Chrysene (C1-C4) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57268
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40251, Chrysene (C1-C4) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57267
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support

	and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40454 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40454, Copper **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57279
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40454, Copper **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57278
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40454, Copper **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16048
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40454, Copper **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16035
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49579 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four sediment samples exceed the evaluation guideline for aquatic life uses. Zero of the zero water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is zero and although several samples were collected, they are all reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49579, Cyfluthrin Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57280
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49579, Cyfluthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57281
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49579, Cyfluthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57291
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49579, Cyfluthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57304
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49579, Cyfluthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57292
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49579, Cyfluthrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57293
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49580 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment samples exceed the evaluation guideline for aquatic life uses. Zero of the zero water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is zero and although several samples were collected, they are all reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49580, Cyhalothrin, Lambda **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57306
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49580, Cyhalothrin, Lambda **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57305
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49580, Cyhalothrin, Lambda **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57112
Pollutant:	Cyhalothrin, Lambda

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyhalothrin, lambda, total. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49580, Cyhalothrin, Lambda **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57100
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyhalothrin, lambda, total. Nine sample results were not used in the assessment because the laboratory data reporting

	limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49580, Cyhalothrin, Lambda **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57114
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

	average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49580, Cyhalothrin, Lambda **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57099
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 2 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing,

	watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49580, Cyhalothrin, Lambda **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57098
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 2 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49580, Cyhalothrin, Lambda **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57113
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID **49586** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6

Conclusion:	of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the three sediment samples exceed the evaluation guideline for aquatic life uses. Zero of the zero water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is zero and although several samples were collected, they are all reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49586, Cypermethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57126
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49586, Cypermethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57140
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 2 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).

Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49586, Cypermethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57141
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for CYPERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49586, Cypermethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57142
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for CYPERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49586, Cypermethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57127
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49586, Cypermethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57128
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 2 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49586, Cypermethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57153
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides.

	Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49586, Cypermethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57154
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	49403	Region 3
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. This pollutant and its LOEs was previously associated with LOE for Total DDT and the isomers DDE and DDT. In the 2014 assessment cycle, individual decisions for each pollutant (isomer) were created. Nine lines of evidence are available in the administrative record to assess this pollutant. Three LOEs summarize DDD concentrations in water samples. One of nine samples exceeds the evaluation guideline for protection of the Municipal and Domestic Supply use (i.e drinking water). An additional nine samples were collected in 2008 and 2009 but, each of those samples was reported as a non-detect and because the laboratory data reporting limit was above the objective, the results could not be quantified with the level of certainty required by the Listing Policy. Therefore, those LOEs show that zero of the zero samples exceed the evaluation guidelines. Six LOEs summarize DDD concentrations in sediment samples. Zero of the six samples exceed the evaluation guidelines for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of nine water samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use and zero of six sediment samples exceed the evaluation guideline for protection of aquatic life uses. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49403, DDD (Dichlorodiphenyldichloroethane)	**Region 3**
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	

LOE ID: 57168

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49403, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57170
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49403, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57182
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDD. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

	for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49403, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57184
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDD. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49403, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57167
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDD(p,p). Nine sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD criteria for the protection of human health from consumption of organisms only is 0.00084 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49403, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57155
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results

	are as follows: 0 of 0 samples exceed the criterion for DDD(p,p). Nine sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00083 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49403, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57169
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

	for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49403, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57183
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49403, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	29999
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. One of the 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for 4,4'-DDD is 0.00083 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID 49587 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing

status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four sediment samples exceed the evaluation guideline for aquatic life uses. Zero of the nine water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49587, Deltamethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57269
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49587, Deltamethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57271
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP

	format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49587, Deltamethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57282
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49587, Deltamethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57283
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49587, Deltamethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57284
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49587, Deltamethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57270
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

	Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49590 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the seven samples exceed the evaluation guidelines for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49590, Demeton Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57297
Pollutant:	Demeton

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49590, Demeton **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57296
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49590, Demeton **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57295
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49590, Demeton **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57294
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 49588 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant: Dichlorvos

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the evaluation guidelines for aquatic life uses and for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49588, Dichlorvos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57145
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49588, Dichlorvos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57118
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49588, Dichlorvos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57144
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49588, Dichlorvos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57143
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49588, Dichlorvos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57156
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49588, Dichlorvos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57131
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49588, Dichlorvos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57130
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49588, Dichlorvos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57129
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.

Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49588, Dichlorvos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79758
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA IRIS one-in-a-million cancer risk estimate from oral exposure for dichlorvos is 0.1 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	49591	Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the evaluation guidelines for aquatic life uses and for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49591, Dimethoate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57173
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49591, Dimethoate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57200
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49591, Dimethoate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57159
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49591, Dimethoate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57185
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49591, Dimethoate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57186
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49591, Dimethoate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57187
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49591, Dimethoate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57201
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49591, Dimethoate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57171
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49591, Dimethoate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57172
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification Levels and Response Levels
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49592 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 samples exceed the evaluation guidelines for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49592, Disulfoton **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57216
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49592, Disulfoton **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57217
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Disulfoton.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49592, Disulfoton **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57215
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DISULFOTON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49592, Disulfoton **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57204
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49540** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant: **Dyfonate (Fonofos or Fonophos)**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guidelines for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the six samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49540, Dyfonate (Fonofos or Fonophos) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57230
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49540, Dyfonate (Fonofos or Fonophos) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57231
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.

Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 40262 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40262, Endrin Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 57244

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40262, Endrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57232
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40262, Endrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16574
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40262, Endrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16573
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49594 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the four sediment samples exceed the evaluation guideline for aquatic life uses. Zero of the 15 water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49594, Esfenvalerate/Fenvalerate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57273
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49594, Esfenvalerate/Fenvalerate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57245
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis

	Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49594, Esfenvalerate/Fenvalerate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57259
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49594, Esfenvalerate/Fenvalerate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57260
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49594, Esfenvalerate/Fenvalerate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57272
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49594, Esfenvalerate/Fenvalerate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57247
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49594, Esfenvalerate/Fenvalerate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57258
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49594, Esfenvalerate/Fenvalerate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57246
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49596 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Ethalfluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49596, Ethalfluralin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57285
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 1.4 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L as determined in a 50 day toxicity study with the Bluegill sunfish, Lepomis macrochirus. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

	Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49596, Ethalfluralin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57274
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 1.4 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L as determined in a 50 day toxicity study with the Bluegill sunfish, Lepomis macrochirus. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49597 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 13 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49597, Ethoprop Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57300
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are

	as follows: 0 of 6 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49597, Ethoprop **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57299
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49597, Ethoprop **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57287
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

	Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49597, Ethoprop **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57298
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49597, Ethoprop **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57105
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49597, Ethoprop **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57286
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 49537 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Fenamiphos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the six samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample

size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the six samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49537, Fenamiphos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57107
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis

	Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49537, Fenamiphos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57106
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49537, Fenamiphos **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57119
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for fenamiphos is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49599 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the four sediment samples exceed the evaluation guideline for aquatic life uses. Zero of the nine water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49599, Fenpropathrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57120
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49599, Fenpropathrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57121
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49599, Fenpropathrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57134
Pollutant:	Fenpropathrin

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49599, Fenpropathrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57133
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49599, Fenpropathrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57132
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca.

	Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49599, Fenpropathrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57135
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49603 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49603, Fipronil **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57146
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 2 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 1 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49603, Fipronil **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57147
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 2 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 1 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 49604 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49604, Fipronil Sulfide Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57148
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 2 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 1 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49604, Fipronil Sulfide **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57160
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 2 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 1 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 49605 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table

3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49605, Fipronil Sulfone **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57162
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 2 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol.

Chem. 27(12):2582-2590.

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49605, Fipronil Sulfone **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57161
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: A total of 3 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 2 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	40926	Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40926, Fluoranthene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57175
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support

	and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40926, Fluoranthene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57174
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40926, Fluoranthene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16408
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40926, Fluoranthene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16421

Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40927 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to

determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40927, Fluorene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16489
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40927, Fluorene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16490
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40927, Fluorene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57177
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40927, Fluorene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57176
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life

	(Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 49528 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Hexazinone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses . This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49528, Hexazinone Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57188
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L based on a 120 hour toxicity study of green algae (selenastrum capricornutum).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49528, Hexazinone **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57189
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results

	are as follows: 0 of 9 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L based on a 120 hour toxicity study of green algae (selenastrum capricornutum).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51987** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Iprodione**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of nine water samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of nine water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51987, Iprodione **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57190
Pollutant:	Iprodione
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Iprodione.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Iprodione is 280 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water with 0.04 mg/kg/day as the reference dose. An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Summary for Iprodione
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40942 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40942, Lead **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57205
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40942, Lead **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57191
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40942, Lead **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17370
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40942, Lead **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17371
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49607 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49607, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57206
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49607, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57207
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **49609** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 samples exceed the evaluation guideline for Municipal and Domestic Supply use (i.e. drinking water) and this use support rating is set to 'fully supported'. Zero of seven samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is zero in LOEs 57235 and 57234 and although nine samples were collected, all samples are reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results of the samples could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57221
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57220
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water life-time health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57219
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57218
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57234
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for MALATHION. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.

Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57233
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57235

Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for MALATHION. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57208
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support

	and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57250
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing,

	watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57249
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57248

Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49609, Malathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57236
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 40755 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40755, Mercury **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57261
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40755, Mercury **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57262
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40755, Mercury **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17204
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40755, Mercury **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17203
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49612 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the evaluation guidelines for Municipal and Domestic Supply use (i.e. drinking water) and for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 15 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49612, Methidathion Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57264

Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49612, Methidathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57277
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Methidathion.

Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49612, Methidathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57276
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration

	(MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49612, Methidathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57275
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]

Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49612, Methidathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57263
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49612, Methidathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57288
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49600 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Sixteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Zero of the four sediment samples exceed the evaluation guideline for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57122
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).

Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57123
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57290
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57096
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57097
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing,

	watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57094
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57095
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57124
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results

	are as follows: 0 of 3 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57109
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish

	and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57110
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57111
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57108
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57302
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phorate is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57303
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57289
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Parathion, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49600, Methyl Parathion **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57301
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 49531 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Molinate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial

uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49531, Molinate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57136
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49531, Molinate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57137
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49531, Molinate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57125
Pollutant:	Molinate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for molinate is 20 ug/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40768 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40768, Naphthalene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57139
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40768, Naphthalene — Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57138
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40768, Naphthalene — Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17270
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40768, Naphthalene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17257
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49533 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Napropamide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49533, Napropamide Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57150
Pollutant:	Napropamide

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49533, Napropamide **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57149
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40757 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. One of the two samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40757, Nickel **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57151
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40757, Nickel **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57152
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40757, Nickel **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17093
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40757, Nickel **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17092
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49601 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 44 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 44 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49601, Nitrogen, Nitrite — Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51409
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49601, Nitrogen, Nitrite **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51408
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	40195	Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Forty lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Fifty-four of the 455 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 17 of the 455 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-four of the 455 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 17 of the 455 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51453
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51451
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51450
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52889
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52873
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52863
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52848
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51452
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 12 of 39 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51190
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51189

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 12 of 39 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51188
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin

	Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51466
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 7 of 39 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57418
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57420
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 5 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57202
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 7 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57203
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 7 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15301
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	168
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 168 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field

	Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14744
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 14 of 43 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12850
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12851
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12852
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 62 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12885
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 16 of 52 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12886
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 16 of 52 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12870
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 52 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12796
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 62 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12782
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 17 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12869
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 13 of 52 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12090
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12091
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 17 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12092
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 17 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47825
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009 3:40:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water

Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18249
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18248
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47909
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]

Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009 3:40:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15080
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	99
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 17 of 99 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15081

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	99
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 17 of 99 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14745
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 14 of 43 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14742
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 6 of 43 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced

	below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14743
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 3 of 43 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40195, Oxygen, Dissolved **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15286
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	168
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 16 of 168 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 49608 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49608, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57435
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49608, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57434
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49534	Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Pentachlorobenzene (PCNB)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49534, Pentachlorobenzene (PCNB) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57437
Pollutant:	Pentachlorobenzene (PCNB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales

	Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PCNB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services archived Advisory Level for Pentachloronitrobenzene is 20 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49602 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the four sediment samples exceed the evaluation guideline for aquatic life uses. One of the water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the water samples and zero of the sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49602, Permethrin, total **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57479
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49602, Permethrin, total **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57480
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support. Six samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49602, Permethrin, total **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57464
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49602, Permethrin, total **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57450
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49602, Permethrin, total **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57449
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49602, Permethrin, total **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57448
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49602, Permethrin, total **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57465

Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PERMETHRIN. Eight sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49602, Permethrin, total **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57466
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PERMETHRIN. Eight sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40748 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40748, Phenanthrene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57517
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40748, Phenanthrene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57502
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40748, Phenanthrene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16924
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40748, Phenanthrene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16938
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49613 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 13 samples exceed the evaluation guidelines for Municipal and Domestic Supply use (i.e. drinking water) and for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 13 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49613, Phorate Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57518

Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49613, Phorate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57519
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]
Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49613, Phorate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57553
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49613, Phorate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57552
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The national health advisory level for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SAC, Salinas River (Lower) - 309SSP]

Temporal Representation:	Data was collected over the time period 8/24/2006-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49613, Phorate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57551
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49613, Phorate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57534
Pollutant:	Phorate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49613, Phorate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57536
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49613, Phorate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57535
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River at Davis Road - 309DAV, Â Salinas River - 309SBR]
Temporal Representation:	Data was collected over the time period 9/13/2004-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard

	Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49613, Phorate **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57537
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 49541 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49541, Phosmet **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57568
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]

Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49541, Phosmet **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57554
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49541, Phosmet **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57569
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49543 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Prometryn**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49543, Prometryn **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57571
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49543, Prometryn **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57323
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for prometryn is 28 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49543, Prometryn **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57570
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales

	Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **49545** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Propanil (DCPA mono- and di-acid degrad)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49545, Propanil (DCPA mono- and di-acid degrad) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57325
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.6 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L, as determined in a 60 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49545, Propanil (DCPA mono- and di-acid degrad) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57324

Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.6 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L, as determined in a 60 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49547 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Propiconazole**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses. This sample size is insufficient to

determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49547, Propiconazole **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57339
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L) based on a 96 toxicity study of Rainbow trout (Oncorhynchus mykiss).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49547, Propiconazole **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57340
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L) based on a 96 toxicity study of Rainbow trout (Oncorhynchus mykiss).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **40790** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the three samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40790, Pyrene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57341
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40790, Pyrene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57342
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40790, Pyrene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16908
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40790, Pyrene **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16895
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49567 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Resmethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49567, Resmethrin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57357
Pollutant:	Resmethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for RESMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Resmethrin is 210 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49570 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Simazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49570, Simazine **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57359
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49570, Simazine **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57360
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49570, Simazine **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57358
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for simazine is 0.004 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40873 **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Seventy-nine of the 488 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy-nine of the 488 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52935
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51332
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51333
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57375
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 12 of 40 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]

Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12867
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 6 of 62 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15245
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	198
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 39 of 198 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12093
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17

Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 3 of 17 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12904
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 52 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	18631
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13768
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [Chualar River Rd, Davis Rd]
Temporal Representation:	Data was collected on a single day 1/3/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14505
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	43
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 7 of 43 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40873, Temperature, water **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	47844
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009 3:40:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 49572 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Thiobencarb/Bolero**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49572, Thiobencarb/Bolero Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57376
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for thiobencarb is 0.07 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49572, Thiobencarb/Bolero **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57389
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.0 ug/L and the no observed effect concentration (NOEC) of 1.0 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49572, Thiobencarb/Bolero **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57388
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.0 ug/L and the no observed effect concentration (NOEC) of 1.0 ug/L, as determined in a

	21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49573 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Trifluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49573, Trifluralin Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57452
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.18 ug/L and the no observed effect concentration (NOEC) of 1.14 ug/L as determined in a 48 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49573, Trifluralin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57453
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.18 ug/L and the no observed effect concentration (NOEC) of 1.14 ug/L as determined in a 48 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49574 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Vinclozolin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49574, Vinclozolin **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57468
Pollutant:	Vinclozolin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Vinclozolin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Vinclozolin is 180 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **40734** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40734, Zinc — Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57469
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40734, Zinc **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57470
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]

Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40734, Zinc **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17683
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40734, Zinc **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	17684
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **52477** **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Channelization | Flow Alteration/Regulation/Modification | Hydromodification | Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional lines of evidence, associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess Benthic macro-invertebrate community effects and 36 supporting lines of evidence for specific contaminants and toxicity are available in the administrative record to support this decision. Both of the benthic invertebrate CSCI scores are below the 0.79 threshold, indicating poor benthic community structure. These data are also

evaluated using the Southern California IBI and both of the samples score below the threshold for impairment of 40 using this index as well. Aquatic life uses are also impacted by elevated levels of nitrate, pesticides and invertebrate test organism have shown significant mortality in toxicity tests.

There is documentation in the administrative record of hydromodification and flow alteration in the Lower Salinas River. These factors could contribute to the degraded benthic community condition in the River. These supporting documents include the following: 1. Higgens,P., August 2009, Comments on Salinas River Channel Maintenance Project (CMP) 404 Permit Application
and Mitigated Negative Declaration. Included in California Coastkeeper Alliance Letter (Administrative Record Reference number 4125). 2. Becker, G.S. and I.J. Reining. 2008. Steelhead/rainbow trout (Oncorhynchus mykiss) resources south of the Golden Gate, California. Cartography by D.A. Asbury. Center for Ecosystem Management and Restoration. Oakland, CA.

As a result of the above mentioned documentation, the following potential sources have been assigned:source unknown, Channelization, Flow Alteration/Regulation/Modification, and Hydromodification.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Both samples were below the California Stream Condition Index (CSCI) score of 0.79 which indicates poor water quality for this area and there are several pollutants impacting aquatic life uses associated with this decision.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs).

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12888
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 23 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24564
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 4/14/2005-5/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24528
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles].
Temporal Representation:	Data was collected over the time period 2/17/2005-9/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13993
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 38 of 42 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [Davis Rd, Del Monte Rd]
Temporal Representation:	Data was collected over the time period 3/13/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance

measurements are not consistently documented in this data set.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12905
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309DAV-Salinas River at Davis Road , 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24485
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13719
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 17 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water

	Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [Davis Rd, Del Monte Rd]
Temporal Representation:	Data was collected over the time period 3/13/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24556
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca 10-day survival %. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SBR-Salinas River at Highway 1].
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	13904
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 8 of 42 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [Davis Rd, Del Monte Rd]
Temporal Representation:	Data was collected over the time period 3/13/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28122
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	49
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Salinas). Fourty-nine of the 60 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1].
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. The Salinas Watershed Rotation Area has been monitored twice, in 1999 and in 2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	12723
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 14 of 24 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/24/2000-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28119
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	51

Number of Exceedances:	43
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP Coastal Confluences. Fourty-three of the 51 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road].
Temporal Representation:	Data was collected over the time period 7/25/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28108
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). Five of the 7 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 4/14/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28132
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	181
Number of Exceedances:	168
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: National Estuarine Research Reserve Monitoring Program (R3_ESNERR). Monitoring was conducted approximately monthly and 168 of 181 samples exceed the evaluation guideline.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-12/4/2006. Monitoring was conducted approximately monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28163
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Long Term Environmental Assessment Program (R3_CCLEAN)
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-5/4/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28159
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	107
Number of Exceedances:	81
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 6 monitoring sites [River Rd (Nr East Garrison), Davis Rd, Del Monte Rd, Chualar River Rd, Blanco Rd, Hwy

	68]
Temporal Representation:	Data was collected over the time period 10/20/2000-6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	16232
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	48626
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309SSP - Salinas River (Lower) at Spreckles, 309SAC-Salinas River at Chualar bridge on River Road, 309SAG-Salinas River at Gonzales bridge on River Road]
Temporal Representation:	Data was collected over the time period 2/15/2007-8/25/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	15313
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	194
Number of Exceedances:	85

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 85 of 194 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River Bridge]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	24520
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 3 monitoring sites [309DAV-Salinas River at Davis Road , 309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	30008
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Two of the 9 samples exceed the Criteria Continuous Concentration.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without

	deleterious effects for 4,4'-DDT is 0.001 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	28145
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory

	Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 4 monitoring sites [309-SALIN-31 - Salinas River at Gypse Camp, 309-SALIN-32 - Salinas River at Davis Road, 309-SALIN-33 - Salinas River at Chualar Bridge, 309-SKYLI-31 - Skyline]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14491
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 26 of 44 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SSP - Salinas River at Spreckles]
Temporal Representation:	Data was collected over the time period 1/27/2005-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57467
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 32 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52835
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 30 of 31 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57103
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 2/15/2007-3/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57451
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 309DAVxxx.
Temporal Representation:	The sample was collected in June 2008.

Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57038
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores are 39 or below and therefore are below the impairment threshold of the Southern California IBI. In both 2005 and 2007, a methods comparison study was conducted in this waterbody resulting in the collection of more than one sample at the Salinas River at Davis Road station and more than one IBI score was reported for each event. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the samples that were collected following the SWAMP Reach Wide Benthos method that is modified for low gradient reaches to include the habitat on the margins. This method is identified in the data as RWB-MCM. The two RWB-MCM samples included in this assessment have the following IBI scores: The 2005 sample IBI score was 7 and the 2007 sample IBI score was 24.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 309DAVxxx-Salinas River at Davis Road.
Temporal Representation:	Surveys done on May 3, 2005 and April, 4 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51448
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 33 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51331
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SAC-Salinas River at Chualar bridge on River Road, 309SBR-Salinas River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	52965
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 5 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLRBRG - Salinas River at the Highway 1/Railroad Bridge]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51193
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 14 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309DAV-Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	51463
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Lower) to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 2 monitoring sites [309SBR-Salinas River at Highway 1 , 309SAC-Salinas River at Chualar bridge on River Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57440
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity and did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at stations 309DAV - Salinas River at Davis Road.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	59001
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. One of the samples exhibited significant toxicity to Selenastrum capricornutum but had no significant effects to either Ceriodaphnia dubia, or Pimephales promelas. The significant effect to S. capricornutum is not counted as an exceedance here because the conductivity of the sample water was above the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. SWAMP guidance (July 2013) for Selenastrum capricornutum toxicity testing is twofold; 1) inclusion of appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. The conductivity of the sample water from September 22, 2009 was higher than 1500 uS/cm but the significance of the toxic effect for the sample result was not calculated using the high salinity control sample and therefore should not be counted as an exceedance.
Data Reference:	Coastal Confluences 2008 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. EPA-821-R-02-012 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at stations 309DAVxxx - Salinas River (lower) at Davis Road.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79755
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Five of the 9 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected from station 309SAC resulted in toxic effects to Ceriodaphnia dubia on 1/24/08 and 2/23/08 and to Pimephales promelas on 2/28/08. Samples collected from station 309SSP resulted in toxic effects to Ceriodaphnia dubia on 1/24/08 and 1/20/10 and to Pimephales promelas 2/23/08. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data

set).

Guideline Reference:

Spatial Representation: The samples were collected at two station in the lower Salinas River (309SAC and 309SSP).

Temporal Representation: The samples were collected from January 2008 to March 2010.

Environmental Conditions:

QAPP Information: The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.

QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID: 79757

Pollutant: Toxicity

LOE Subgroup: Toxicity

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 9

Number of Exceedances: 2

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: Nine samples were collected to evaluate water toxicity. Two of the nine samples exhibited significant toxicity. All nine samples were tested for toxicity to Ceriodaphnia dubia and one of those samples was also tested using Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in the sample collected on 10/14/09. Statistically significant effects on Ceriodaphnia dubia were observed in the sample collected on 10/22/2009.

Data Reference: Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.

Guideline Reference:

Spatial Representation: The samples were collected at Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) station 309DAV-Salinas River at Davis Road.

Temporal Representation: The samples were collected between January 2008 and October 2009.

Environmental Conditions:

QAPP Information: The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79703
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in the sample collected on 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) station 309DAV-Salinas River at Davis Road.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	79704
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to evaluate sediment toxicity. None of the 5 samples exhibited

	significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at two lower Salinas River stations (309SAC and 309SSP).
Temporal Representation:	The samples were collected in annualy in April 2007-2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	80737
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for this site are 0.276787181 and 0.349628982. Both samples are below the 0.79 threshold and are exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by

	comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 309DAVxxx-Salinas River at Davis Road.
Temporal Representation:	Surveys done on May 3, 2005 and April, 4 2007.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 52477, Benthic Community Effects **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57417
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 2 monitoring sites [Salinas River (Lower) - 309SSP, Salinas River (Lower) - 309SAC]
Temporal Representation:	Data was collected over the time period 3/25/2009-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 49404 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. This pollutant and its LOEs was previously associated with LOE for Total DDT and the isomers DDE and DDT. In the 2014 assessment cycle, individual decisions for each pollutant (isomer) were created. Eight lines of evidence are available in the administrative record to assess this pollutant. Two LOEs summarize DDE concentrations in water samples. Nine of 11 samples exceeds the evaluation guideline for protection of the Municipal and Domestic Supply use (i.e drinking water). An additional seven samples were collected in 2008 and 2009 and are summarized in LOE 57196 but, each of those samples was reported as a non-detect and because the laboratory data reporting limit was above the objective, the results could not be quantified with the level of certainty required by the Listing Policy. Six LOEs summarize DDE concentrations in sediment samples. One of the six samples exceed the evaluation guidelines for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 11 water samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49404, DDE (Dichlorodiphenyldichloroethylene) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57198
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49404, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57213
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49404, DDE (Dichlorodiphenyldichloroethylene) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57214
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for DDE. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49404, DDE (Dichlorodiphenyldichloroethylene) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57196
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for DDE(p,p). Seven sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDE(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49404, DDE (Dichlorodiphenyldichloroethylene) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57212
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for DDE. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/25/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49404, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57197
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAVxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49404, DDE (Dichlorodiphenyldichloroethylene) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	57199
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) was collected at 1 monitoring site [Salinas River at Davis Road - 309DAV]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 49404, DDE (Dichlorodiphenyldichloroethylene) Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	30000
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Seven of the 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for 4,4'-DDE is 0.00059 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Salinas River 1.6 miles below Blanco Road on north shore (Lat, N 36.6950, Long, W 121.7502)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 5th, 2002 and the ninth event was initiated on October 10th, 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.

QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID 40256 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Eight of 34 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 34 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of 34 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40256, Enterococcus Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	14175
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	34
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 1 of 34 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road]
Temporal Representation:	Data was collected over the time period 1/22/2002-5/4/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40256, Enterococcus **Region 3**

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	26064
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	34
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Salinas River (Lower) to determine beneficial use support and results are as follows: 8 of 34 samples exceed the EPA criterion for Enterococcus.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in frshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Lower) was collected at 1 monitoring site [309SLR_CCL - Salinas River at Davis Road].
Temporal Representation:	Data was collected monthly over the time period 1/22/2002-5/4/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID 34734 Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

Pollutant:	**Toxaphene**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.5 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the 2 samples exceeded the evaluation guideline used to evaluate the narrative water quality objective for commercial and recreational fishing uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 2 samples exceeded the evaluation guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34734, Toxaphene Region 3

Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)

LOE ID:	1879
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Two out of 2 samples exceeded (TSMP, 2002). One whole fish composite sample of hitch and of sucker was collected. Hitch was collected in 1992 and suckers were collected in 1998. The guideline was exceeded in both samples.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	100 ng/g - NAS Guideline (whole fish) (NAS, 1972).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Two stations were sampled: about 1/2 mile downstream of the Blanco Drain discharge to the Salinas River and at the Davis Road crossing.
Temporal Representation:	Samples were collected in 1992 and 1998.
Environmental Conditions:	
QAPP Information:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)**
Water Body ID: **CAR3091101020020319092611**
Water Body Type: **River & Stream**

DECISION ID **40291** **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Eight of 54 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 44 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 54 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 44 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 40291, Escherichia coli (E. coli) **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID: 51213

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40291, Escherichia coli (E. coli) **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11124
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 8 of 44 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40291, Escherichia coli (E. coli) **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11125
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	44
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 44 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 34731 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Pesticides**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4 of the Listing Policy. One line of evidence (LOE) is available in the administrative record to assess this pollutant but no data or information is associated with that LOE. The data cannot be found that was used in the initial assessment of this water segment-pollutant combination. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for this water segment-pollutant combination to be on the List. Furthermore, newer data for individual pollutants are available and will be assessed under individual decisions. Those decisions will replace this decision for the generic pollutant category 'Pesticides'. This conclusion is based on the staff findings that: 1. The data used for the original decision are not available and therefore do not satisfy the data quality requirements of section 6.1.4 of the Policy. 2. The data used for the original decision are not available and therefore do not satisfy the data quantity requirements of section 6.1.5 of the Policy. 3. No data is available to assess the status of this water body for this generic pollutant and newer data for individual pollutants under this general category are available and are assessed in separate decisions. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available for this general category
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because newer data for individual pollutants under this general category are available and are assessed in separate decisions.

Line of Evidence (LOE) for Decision ID 34731, Pesticides Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	4001
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 40336 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eighteen of 98 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 1 of 98 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighteen of the 98 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40336, Fecal Coliform Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11050
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	88
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 18 of 88 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40336, Fecal Coliform **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11084
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	88

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 88 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40336, Fecal Coliform **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51212
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40336, Fecal Coliform **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51215
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]

Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39367 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Forty-four of the 199 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-four of the 199 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39367, Temperature, water Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51207
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39367, Temperature, water **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57561
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39367, Temperature, water **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57562
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 16 of 66 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39367, Temperature, water **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	13769
Pollutant:	Temperature, water

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 1 monitoring site [Lockwood]
Temporal Representation:	Data was collected on a single day 1/3/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39367, Temperature, water **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12942
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	86
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 18 of 86 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39367, Temperature, water **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12798
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 7/2/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39367, Temperature, water **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14722
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 7 of 20 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40070** **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Three LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and seven additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, nine total samples are available to assess toxic effects in sediment samples. Zero of the nine sediment samples resulted in a significant toxic effect to one or more test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Thirteen LOEs summarize water samples. Ten water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and sixteen water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-six total samples are available to assess toxic effects in water samples. Twelve of the twenty-six water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 26 samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24539
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24541
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 2/23/2006-8/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24540
Pollutant:	Invertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24506
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 2/23/2006-8/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24516
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 2/23/2006-8/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24498
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24507
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint

	when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24548
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 2/23/2006-8/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24557
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected on a single day 5/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24515
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 2/23/2006-8/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24508
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24499
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 2/23/2006-8/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24497
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/13/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	24558
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]

Temporal Representation:	Data was collected on a single day 5/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57564
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	10
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Sixteen samples were collected to evaluate water toxicity. Ten of the sixteen samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples from station 309GRN resulted in toxic effects to Ceriodaphina dubia on 1/24/08 and 2/23/08 and to Pimephales promelas on 2/23/08 and 3/30/10. Samples from station 309SAG resulted in toxic effects to Ceriodaphnia dubia on 1/24/08 and on 2/23/08 and to Pimephales promelas on 2/23/08, 8/25/09 and 3/30/10. Samples from station 309USA resulted in toxic effects to Ceriodaphina dubia on 1/24/08 and 9/30/08 and to Pimephales promelas on 2/23/08. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle. Samples exhibited significant toxicity to survival and reproduction of Ceriodaphnia dubia and Pimephales promelas growth and survival.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309GRN Salinas River at Greenfield, 309USA Salinas River at Bradley and 309SAG salinas river at Gonzales.
Temporal Representation:	The samples were collected from January 2008 and March 2010.

Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40070, Toxicity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57315
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Seven samples were collected to evaluate sediment toxicity. None of the seven samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at 309GRN Salinas River in Greenfield, 309USA Salinas River at Bradley and 309SAG Salinas River at Gonzales.
Temporal Representation:	The samples were collected annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39717 **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Seventy-three of the 198 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 69 of the 138 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-three of the 198 samples exceed the evaluation guideline for Cold Freshwater Habitat and 69 of the 138 samples exceed the Warm Freshwater Habitat evaluation guideline and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39717, Turbidity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57316
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	64
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 40 of 64 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Shoup, D.E. and D.H. Wahl (2009) states that largemouth bass had more difficulty in capturing rapidly moving fish prey at 40 NTU and the overall foraging rate was much lower.
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39717, Turbidity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57317
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	64
Number of Exceedances:	44
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 44 of 64 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39717, Turbidity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51206
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39717, Turbidity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51228
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the

	criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39717, Turbidity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14707
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 9 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon.

	Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39717, Turbidity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14721
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 9 of 19 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39717, Turbidity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12963
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 20 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 4/19/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39717, Turbidity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12962
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 20 of 45 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - SALINAS R A PASO ROBLES CA]
Temporal Representation:	Data was collected over the time period 4/19/2000-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39380 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Thirty-six lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Thirty-six of the 150 samples exceed the water quality objective for Agriculture and 54 of the 150 samples exceed the water quality objectives for Drinking Water and Recreation. These uses are not supported. However only 18, of the 108 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and these uses are fully supported.
Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-six of the 150 samples exceed the water quality objective for Agriculture and 54 of the 150 samples exceed the water quality objectives for Drinking Water and Recreation. These exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11103
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	49
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 5 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 11/11/1999-12/13/2006. Salinas watershed is one

	of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11104
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	49
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 5 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 11/11/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14689
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14690
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 9 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14691
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 9 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11087
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 11/11/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11086
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 11/11/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11068

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11067
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11066
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11106
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 11/11/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11105
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	49
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 5 of 49 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 11/11/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14705
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11123
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11122
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/14/2006. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11121
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 9/2/1999-8/14/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14704
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 9 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14688
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 5 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51214
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]

Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51211
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51205
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51198
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all

	Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51227
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51216
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57508
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	66
Number of Exceedances:	33

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 33 of 66 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57493
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 14 of 66 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57492
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57491
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57490
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57489
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57488
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57475
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57510
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	66
Number of Exceedances:	33

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 33 of 66 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57511
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 14 of 66 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57509
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	66
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 33 of 66 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39380, pH **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57512
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	66
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing

	to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 26 of 66 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	50139	Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Alkalinity as CaCO3**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50139, Alkalinity as CaCO3 **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57483
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 50139, Alkalinity as CaCO3 **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57484
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 40046 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Ten LOEs summarize unionized ammonia data in which three of the 142 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Five LOEs summarize total ammonia data and zero of the 187 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 142 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 187 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57487
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57486
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	65
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 3 of 65 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57485
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	65
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 3 of 65 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia

	(NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57505
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57504

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	69
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 69 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. (EPA 822-R-06-013, 2006).
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57503
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51199
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51208
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51221
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	9538
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 11/11/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	9537
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas

	River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 11/11/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	9536
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 87 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14653
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	15233
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40046, Ammonia **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14652
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50140 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50140, Azinphos-methyl (Guthion) **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57507
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50140, Azinphos-methyl (Guthion) **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57506
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing

	to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Azinphos methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**50153**	**Region 3**
Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample exceeded the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample had a SoCal IBI score below 40 which indicates poor water quality for this area. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 50153, Benthic Community Effects **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57520
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The IBI score for this site was 30.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. RG 3 BP
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	
Spatial Representation:	The sample was collected from Salinas River PS0040.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Perennial Streams Assessment 2008 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	

DECISION ID 39831 **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 87 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 87 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39831, Boron **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51471
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Boron, dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39831, Boron **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	9539
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	77
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 77 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad].
Temporal Representation:	Data was collected over the time period 5/10/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39689** **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the 88 samples exceed the water quality objective for agricultural uses and three of the 98 samples exceed the site specific objective applied to the Warm Freshwater Habitat beneficial use. However; the site specific objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and none of the annual means exceed the site specific objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 87 samples exceed the water quality objective for agricultural uses and zero of the annual means exceed the site specific objective. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39689, Chloride **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	26021
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	87
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas data for Salinas River (Mid) to determine beneficial use support and results are as follows: Three of 87 samples exceed the water quality objective for Agricultural Supply.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters are listed in table 3-7 of the Water Quality Control Plan, Central Coast Region (Section II.A.3, page III-12). The plan states that these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin. Objectives are expressed as a median value and are based on preservation of existing quality ore water quality enhancement believed attainable following control of point sources. The median value for chloride in the Salinas River between Spreckles and Bradley shall not exceed 80 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River down stream of San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS Â– Salinas River at Highway 101 in Soledad]. These four sites are located above Spreckles (as is specified by the waterbody specific objective).
Temporal Representation:	Data was collected over the time period 5/10/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (Puckett, 2002).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39689, Chloride **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	26020
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	87
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas data for Salinas River (Mid) to determine beneficial use support and results are as follows: One of 87 samples exceed the water quality objective for Agricultural Supply.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River down stream of San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS Â– Salinas River at Highway 101 in Soledad].
Temporal Representation:	Data was collected over the time period 5/10/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (Puckett, 2002).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39689, Chloride **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51217
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chloride.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 80 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39689, Chloride **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57524
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 39689, Chloride **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57521
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Chapter III, Section II. Table 3-7 specifies the Chloride objective for the Salinas River as 20 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 39849 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Two of the 181 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 181 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39849, Chlorophyll-a Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51222
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39849, Chlorophyll-a **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51200
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39849, Chlorophyll-a **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57538
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 66 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A â€“ Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39849, Chlorophyll-a **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57539
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 66 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A â€“ Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	9541
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	85
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 85 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39849, Chlorophyll-a **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14654
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39849, Chlorophyll-a **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	9540
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	85
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 85 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39849, Chlorophyll-a **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14655

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39862 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One of the three water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Twenty-seven water samples are not included in the exceedance count because the limit of quantification was greater than the evaluation guideline and the results were non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of the 2 samples exceed the USEPA drinking water health advisory. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One out of three water samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39862, Chlorpyrifos **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	18658
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for chlorpyrifos.

Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 1 monitoring site [DHS012 - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 8/1/1994-7/11/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39862, Chlorpyrifos **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	18657
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson

	(2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 1 monitoring site [DHS012 - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 8/1/1994-7/11/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39862, Chlorpyrifos **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57540
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39862, Chlorpyrifos **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57541

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39862, Chlorpyrifos **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57555
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50141 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50141, Demeton Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57557
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50141, Demeton **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57556
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 40141 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty-one samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 2 samples exceed the USEPA drinking water health advisory. For the MUN beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40141, Diazinon **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57558
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40141, Diazinon **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57559
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40141, Diazinon **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57572
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]

Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40141, Diazinon **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	18751
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 1 monitoring site [DHS012 - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 8/1/1994-7/11/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40141, Diazinon **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	48633
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 1 monitoring site [309GRN-Salinas River at Elm Road in Greenfield]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40141, Diazinon **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	48632
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 1 monitoring site [309GRN-Salinas River at Elm Road in Greenfield]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40141, Diazinon **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	18752
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 1 monitoring site [DHS012 - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 8/1/1994-7/11/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 50142 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50142, Dichlorvos Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57574
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50142, Dichlorvos **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57573
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50145 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50145, Dimethoate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57575
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services notification level for dimethoate is 1 Âµg/L.
Guideline Reference:	Drinking Water Notification and Response Levels: An Overview
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50145, Dimethoate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57576
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd

	crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50145, Dimethoate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57310
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50154 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the water quality objective for drinking water uses Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50154, Disulfoton Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57313
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Disulfoton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50143 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50143, Ethoprop Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57391
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50143, Ethoprop **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57314
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50147 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50147, Malathion **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57394
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50147, Malathion **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57392
Pollutant:	Malathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50147, Malathion **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57393
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50148 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50148, Methidathion Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57395

Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50148, Methidathion **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57409
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50148, Methidathion **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57408
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methidathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50149 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50149, Methyl Parathion Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57411
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50149, Methyl Parathion **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57425
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish

	and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50149, Methyl Parathion **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57410
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phorate is 1.8 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **40071** **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant: **Nitrate**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Twenty-one lines of evidence are available in the administrative record to assess this pollutant. Zero of the 192 nitrate samples exceed the water quality objectives for the Agricultural Supply beneficial use. Seven of the 193 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Ten of the 30 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Six of the 100 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Thirty-nine of the 89 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. The following is a summary of the supporting evidence: 1) Dissolved oxygen for this water body ranged from 4.72 mg/L to 12.62 mg/L.mg/L, at times exceeding (falling below) the Cold and Warm Freshwater Habitat water quality objective of 7.0 and 5.0 mg/L at one site (309GRN). 2) Water column chlorophyll a concentration ranged up to 77 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 0.31 mg/L to 2.53 mg/L. Several sites exceed the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). 4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 6 g/m2 ash-free dry weight (AFDW) to 57 g/m2 AFDW. These do not exceed the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 or the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).v 5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 15 mg/m2 to 144 mg/m2. These do not exceed the Cold Freshwater Habitat screening threshold of 150 mg/m2 or the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006). Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 30 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Thirty-four of the 79 nitrate/nitrite samples exceed the water quality objectives for Cold Freshwater Habitat. Thirty-nine of the 89 nitrate/nitrite samples exceed the water quality objectives for Warm Freshwater Habitat. Though these exceed the allowable frequency listed in Table 3.1 of the Listing Policy, there is insufficient supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. Evidence of impairment is primarily from one site, 309GRN. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. .
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57428
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	69
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 5 of 69 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (California Code of Regulation, Title 22, Division 4, Chapter 15, Section 64431, Table 64431-A).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57441
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 5 of 20 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57442
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 5 of 20 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57443
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 3 of 20 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Water Quality Control Plan, Central Coast Region).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57444
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected over the time period 10/29/2008-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57426
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51223
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 5 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51224
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 5 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]

Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51195
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51201
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 5 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51202
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 5 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51209
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the

	criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51210
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57455
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	13748
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	75
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 75 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 7 monitoring sites [Lockwood, Greenfield, River Rd Gonzales Bridge, King City, Hwy 101 at Soledad, Bradley Rd, San Ardo]
Temporal Representation:	Data was collected over the time period 1/10/2001-1/3/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	13749
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	75
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 3 of 75 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 7 monitoring sites [Lockwood, Greenfield, River Rd Gonzales Bridge, King City, Hwy 101 at Soledad, Bradley Rd, San Ardo]
Temporal Representation:	Data was collected over the time period 1/10/2001-1/3/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	48623
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	79
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 34 of 79 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309SAG - Salinas River at Gonzales, 309GRN-Salinas River at Elm Road in Greenfield, 309SUN - Salinas River (Upper) above Nacimento River, and 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	9542
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	87
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 87 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	9543
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	87
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 87 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	15246
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	OEHHA public Health Goals for Nitrate and Nitrogen in Drinking Water (December 1997). Page 6.
Objective/Criterion Reference:	Public health goals for nitrate and nitrite in drinking water
Evaluation Guideline:	OEHHA Public Health Goal states that sum of the concentration of nitrate + nitrite shall not exceed 10 mg/L (NO3+NO2 expressed as N).
Guideline Reference:	Public health goals for nitrate and nitrite in drinking water
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40071, Nitrate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	48624
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	79
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 79 of 34 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 3 monitoring sites [309SAG - Salinas River at Gonzalas, 309GRN-Salinas River at Elm Road in Greenfield, 309SUN - Salinas River (Upper) above Nacimento River, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50155 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for aquatic agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50155, Nitrogen, Nitrite **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57456
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 50155, Nitrogen, Nitrite **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51197
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40098 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-two lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Fifteen of the 198 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and one of the 198 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 198 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and one of the 198 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51226
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51203
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51225
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51204
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57471
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57472
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 2 of 66 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57311
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 7 of 66 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57312
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 7 of 66 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57457
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57459
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14671
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 8 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14672
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14673
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 15 of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	14674
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 15 of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 2 monitoring sites [

	309GRN-Salinas River at Elm Road in Greenfield, 309SAG - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 1/25/2006-12/13/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12943
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 7/2/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12944
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 7/2/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12945
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 7/2/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12907
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	86
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 3 of 86 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12961
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 7/2/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12923
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	86
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 86 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12924
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	86
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 7 of 86 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40098, Oxygen, Dissolved **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	12925
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	86
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 7 of 86 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - SALINAS R A PASO ROBLES CA]
Temporal Representation:	Data was collected over the time period 2/2/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 50144 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50144, Parathion **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57474
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50144, Parathion **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57473
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, ethyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50150 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50150, Phorate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57526
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50150, Phorate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57527

Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The National Academy of Sciences health advisory for phorate is 0.7 Âµg/L. This was calculated using the no-adverse-effect dosage of 0.01 mg/kg, assuming 70 kg body weight, 2 liters/day water consumption, 20% relative source contribution from drinking water, and divided by 100 for a factor of safety.
Guideline Reference:	Volume I Drinking Water and Health
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50150, Phorate **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57525
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 50151 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50151, Phosmet Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57528
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50151, Phosmet **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57529
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 50151, Phosmet **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57542
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phosmet.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 2 monitoring sites [Salinas River (Mid) - 309GRN, Salinas River (Mid) - 309SAG]
Temporal Representation:	Data was collected on a single day 8/25/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	49656	Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 10 samples exceed the site specific objective. However; the site specific objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and none of the annual means exceed the site specific objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples (as annual means) exceed the site specific objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49656, Sodium **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51219
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Sodium.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 70 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40113 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Six lines of evidence are available in the administrative record to assess this pollutant. One of the 237 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 237 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40113, Specific Conductivity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51194
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Conductivity(Us).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101, Soledad, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40113, Specific Conductivity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57546
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	66
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 1 of 66 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 3 monitoring sites [Salinas River (Mid) - 309SAG, Salinas River (Mid) - 309GRN, Salinas River (Upper) - 309USA]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/8/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40113, Specific Conductivity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	57545
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) was collected at 1 monitoring site [Salinas River PS0040 - 309PS0040]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 40113, Specific Conductivity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	13847
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	99
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 99 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 7 monitoring sites [Lockwood, Greenfield, River Rd Gonzales Bridge, King City, Bradley Rd, Hwy 101 at Soledad, San Ardo]
Temporal Representation:	Data was collected over the time period 3/15/2000-1/3/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40113, Specific Conductivity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11065
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 7/28/1999-8/17/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40113, Specific Conductivity **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	11085
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River d/s San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS - Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 11/11/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40134 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 146 samples exceed the site specific objective. Note, the samples from all three LOEs are summed here and although the site specific objective was applied to the Wildlife beneficial use in a previous cycle and to the Warm Freshwater Habitat beneficial use in this cycle, the data are compared to the site specific objective. However; the site specific objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and none of the annual means exceed the site specific objective. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the annual means calculated for the site specific objective are exceedances and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40134, Total Dissolved Solids **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	26022
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	85
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas data for Salinas River (Mid) to determine beneficial use support and results are as follows: Nine of 89 samples exceed the water quality objective for Agricultural Supply.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water quality objectives for specific inland surface waters are listed in table 3-7 of the Water Quality Control Plan, Central Coast Region (Section II.A.3, page III-12). The plan states that these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin. Objectives are expressed as a median value and are based on preservation of existing quality ore water quality enhancement believed attainable following control of point sources. The median value for total dissolved solids (TDS) in the Salinas River between Spreckles and Bradley shall not exceed 600 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 4 monitoring sites [309DSA-Salinas River down stream of San Ardo at Cattleman Road , 309GRN-Salinas River at Elm Road in Greenfield, 309KNG-Salinas River at Highway 101 in King City, 309SAS Â– Salinas River at Highway 101 in Soledad]
Temporal Representation:	Data was collected over the time period 5/10/1999-12/13/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP (Puckett, 2002)

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40134, Total Dissolved Solids **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	48634
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 6 of 51 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. TDS shall not exceed 600 mg/L
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 3 monitoring sites [309GRN-Salinas River at Elm Road in Greenfield, 309SUN - Salinas River (Upper) above Nacimento River, 309USA-Salinas River u/s San Ardo at the Bradley Bridge]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40134, Total Dissolved Solids **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	51218
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 600 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 5 monitoring sites [309SAS - Salinas River at Highway 101, Soledad, 309GRN-Salinas River at Elm Road in Greenfield, 309DSA-Salinas River d/s San Ardo at Cattleman Road , 309USA-Salinas River u/s San Ardo at the Bradley Bridge, 309KNG-Salinas River at Highway 101 in King City]
Temporal Representation:	Data was collected over the time period 1/9/2007-2/15/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39832 Region 3

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of twenty-eight water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of twenty-eight water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39832, Carbofuran **Region 3**

Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River)

LOE ID:	18779
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River (Mid) to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for carbofuran.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1 of the Water Quality Control Plan, Central Coast Basin, Municipal and Domestic Supply Objective. Table 3-1 states that Carbofuran shall not exceed 18.0 ug/L (page III-6).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River (Mid) was collected at 1 monitoring site [DHS012 - Salinas River at Gonzales River Rd. bridge]
Temporal Representation:	Data was collected over the time period 8/1/1994-7/11/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Espinosa Slough**
Water Body ID: **CAR3091101019981230135152**
Water Body Type: **River & Stream**

DECISION ID **40301** **Region 3**
Espinosa Slough

Pollutant: **Turbidity**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Forty-nine of the 57 samples exceed the warm freshwater habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-nine of the 57 samples exceed the warm freshwater habitat evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40301, Turbidity **Region 3**
Espinosa Slough

LOE ID: 14603

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 21 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40301, Turbidity **Region 3**

Espinosa Slough

LOE ID:	54123
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 28 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Shoup, D.E. and D.H. Wahl (2009) states that largemouth bass had more difficulty in capturing rapidly moving fish prey at 40 NTU and the overall foraging rate was much lower.
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39566 Region 3

Espinosa Slough

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Sixteen of the 58 samples exceeded the water quality objectives for Recreation uses and 11 of the 58 samples also exceed the water quality objective for Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixteen of the 58 samples exceeded the water quality objectives for Recreation uses and 11 of the 58 samples also exceed the water quality objective for Warm Freshwater Habitats. Each of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39566, pH Region 3

Espinosa Slough

LOE ID:	54119
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 11 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39566, pH **Region 3**

Espinosa Slough

LOE ID:	54117
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 6 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39566, pH **Region 3**

Espinosa Slough

LOE ID:	54118
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	33
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 11 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39566, pH **Region 3**

Espinosa Slough

LOE ID:	14588
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	25
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 5 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39566, pH **Region 3**

Espinosa Slough

LOE ID:	14589
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 5 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39566, pH **Region 3**

Espinosa Slough

LOE ID:	14587
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 5 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	39653	Region 3
Espinosa Slough		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle.

Two lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Five of the 57 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 57 samples exceed the Basin Plan general objective for unionized ammonia and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by the USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 39653, Ammonia **Region 3**

Espinosa Slough

LOE ID:	54145
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 2 of 33 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39653, Ammonia **Region 3**

Espinosa Slough

LOE ID:	14569
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results

	are as follows: 3 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42013**	**Region 3**
Espinosa Slough		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Five of the five samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of the five samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42013, Diazinon **Region 3**

Espinosa Slough

LOE ID:	15111
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

of Fish and Game

Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42013, Diazinon **Region 3**

Espinosa Slough

LOE ID:	54103
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **42356** **Region 3**

Espinosa Slough

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 22 nitrate samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 3.14 mg/L to 21.85 mg/L, frequently exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L. In addition, this waterbody frequently exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentration averaged 29.19 and peaked at 705.00 ug/L, frequently exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body 0f 5.33 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 130 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 324 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 and the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-two of the 22 nitrate samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes and this exceed the allowable frequency listed in Table 4.1 of the Listing Policy. In addition, there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42356, Nitrate — Region 3

Espinosa Slough

LOE ID:	54115
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42356, Nitrate — Region 3

Espinosa Slough

LOE ID:	28101
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). All 10 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41868**	**Region 3**
Espinosa Slough		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and

Conclusion:

4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Nine lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in sediment samples. Five of the five sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Seven LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eighteen total samples are available to assess toxic effects in water samples. Twelve of the eighteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of five sediment samples and 12 of 18 water samples exceed the water quality objective for aquatic life protection and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41868, Toxicity **Region 3**

Espinosa Slough

LOE ID:	24226
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41868, Toxicity **Region 3**

Espinosa Slough

LOE ID:	24190
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183].
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41868, Toxicity **Region 3**

Espinosa Slough

LOE ID:	24236
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with

	alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected on a single day 2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41868, Toxicity **Region 3**

Espinosa Slough

LOE ID:	24201
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected on a single day 2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41868, Toxicity **Region 3**

Espinosa Slough

LOE ID:	24225
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41868, Toxicity **Region 3**

Espinosa Slough

LOE ID:	24213
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 4/12/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41868, Toxicity **Region 3**

Espinosa Slough

LOE ID:	24214
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 9/27/2005-2/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41868, Toxicity **Region 3**

Espinosa Slough

LOE ID:	54122
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Six of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, Survival and growth of Hyalella azteca, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The samples that exhibited toxicity were to Ceriodaphnia were collected on 1/27/09, 2/6/09, 9/30/09, 1/20/10. The sample collected on 10/1/08 was toxic to Hyalella azteca, the species that is substituted for Ceriodaphnia dubia when the salinity of the sample is elevated. The sample collected on 10/23/07 resulted in significant reduction in total cell counts to Selenastrum capricornutum. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309ESP Espinosa Slough.

Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41868, Toxicity **Region 3**

Espinosa Slough

LOE ID:	59007
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate water toxicity. All three samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. All three samples resulted in complete mortality to the test organisms. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309ESP Espinosa Slough.
Temporal Representation:	The samples were collected annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **39789** **Region 3**

Espinosa Slough

Pollutant: **Chlorophyll-a**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 57 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 57 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39789, Chlorophyll-a **Region 3**

Espinosa Slough

LOE ID:	14570
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39789, Chlorophyll-a **Region 3**

Espinosa Slough

LOE ID:	54099
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A â€“ Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**41914**	**Region 3**
Espinosa Slough		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the five samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of five samples exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41914, Chlorpyrifos	**Region 3**
Espinosa Slough	

LOE ID:	54100
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41914, Chlorpyrifos **Region 3**

Espinosa Slough

LOE ID:	15110
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47240**	**Region 3**
Espinosa Slough		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47240, Demeton **Region 3**

Espinosa Slough

LOE ID:	54102
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47240, Demeton **Region 3**

Espinosa Slough

LOE ID:	54101
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **47241** **Region 3**

Espinosa Slough

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined in USEPA 1985). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a

beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 5 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47241, Dichlorvos **Region 3**

Espinosa Slough

LOE ID:	54104
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]

Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47241, Dichlorvos **Region 3**

Espinosa Slough

LOE ID:	54105
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	47242	Region 3
Espinosa Slough		

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline (USEPA Office of Pesticide Programs, 2011). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47242, Dimethoate	**Region 3**
Espinosa Slough	

LOE ID:	54106
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47242, Dimethoate **Region 3**

Espinosa Slough

LOE ID:	54107
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47243 Region 3

Espinosa Slough

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 5 samples exceed the evaluation guideline (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined in USEPA, 1985). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 5 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47243, Ethoprop Region 3

Espinosa Slough

LOE ID:	54109
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47243, Ethoprop **Region 3**

Espinosa Slough

LOE ID:	54110
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**47246**	**Region 3**
Espinosa Slough		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline (CDFW, 1992). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47246, Methyl Parathion **Region 3**

Espinosa Slough

LOE ID:	54114
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47246, Methyl Parathion **Region 3**

Espinosa Slough

LOE ID:	54113
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**40012**	**Region 3**
Espinosa Slough		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 58 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats as well as marine and estuarine habitats. Therefore, the use support rating for this pollutant is set at insufficient information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 58 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40012, Oxygen, Dissolved **Region 3**

Espinosa Slough

LOE ID:	54108
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 5 of 33 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40012, Oxygen, Dissolved **Region 3**

Espinosa Slough

LOE ID:	54116

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40012, Oxygen, Dissolved **Region 3**

Espinosa Slough

LOE ID:	14586
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 9 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40012, Oxygen, Dissolved **Region 3**

Espinosa Slough

LOE ID:	14585
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Espinosa Slough to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [309ESP - Espinosa Slough up stream Highway 183]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **47247** **Region 3**

Espinosa Slough

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the evaluation guideline (maximum acceptable toxicant concentration (USEPA Office of Pesticide Programs, 2011)). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47247, Phorate **Region 3**

Espinosa Slough

LOE ID:	54121
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47247, Phorate **Region 3**

Espinosa Slough

LOE ID:	54120
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as

	determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 47244 Region 3
Espinosa Slough

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 5 samples exceed the Evaluation Guideline (Palumbo, A.J., et al., 2012). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 5 samples exceed the Evaluation Guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47244, Malathion Region 3
Espinosa Slough

LOE ID:	54111
Pollutant:	Malathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 47244, Malathion **Region 3**

Espinosa Slough

LOE ID:	54112
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Espinosa Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Espinosa Slough was collected at 1 monitoring site [Espinosa Slough - 309ESP]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 44457 Region 3

Espinosa Slough

Pollutant:	**Pesticides**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44457, Pesticides Region 3

Espinosa Slough

LOE ID:	3945
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified-- This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 33970 Region 3

Espinosa Slough

Pollutant:	**Priority Organics**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a CWA section 303(d) Listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33970, Priority Organics Region 3

Espinosa Slough

LOE ID:	3946
Pollutant:	Priority Organics
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Blanco Drain**
Water Body ID: **CAR3091101019981209161509**
Water Body Type: **River & Stream**

DECISION ID **34324** **Region 3**
Blanco Drain

Pollutant: **Pesticides**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy.

The data cannot be found that was used in the initial assessment of this water segment-pollutant combination. One line of evidence (LOE) is available in the administrative record to assess this pollutant but no data or information is associated with that LOE.

This decision for the general category of 'Pesticides' is being replaced by individual decisions for each of the pesticides for which there are data. This water segment is being assessed for a full suite of currently applied pesticides such as OP and pyrethroid pesticides. Those individual decisions replace this generic decision for pesticides.

Based on the readily available data and information, there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List as the generic pollutant of pesticides has been replaced by decisions for several individual pesticides.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision is not supported by data and there are data assessed for several different pesticides for this water segment.

Line of Evidence (LOE) for Decision ID 34324, Pesticides **Region 3**
Blanco Drain

LOE ID: 3721

Pollutant: Pesticides
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	**36661**	**Region 3**
Blanco Drain		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Delist from 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; reason for recovery unspecified
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Three of 68 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

The decision to add Blanco Drain to the 303(d) list in 2010 was based on the oxygen saturation data and the median of that data did exceed (fell below) the water quality objective. With the addition of more recent data, the median value is no longer exceeding (below) the water quality objective for oxygen saturation.

The Lower Salinas River Watershed Nutrient TMDL (which included low dissolved oxygen and the Blanco Drain) was completed and approved by USEPA on 10/13/2015.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of 68 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 36661, Oxygen, Dissolved **Region 3**

Blanco Drain

LOE ID:	14513
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36661, Oxygen, Dissolved **Region 3**

Blanco Drain

LOE ID:	48044
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36661, Oxygen, Dissolved **Region 3**

Blanco Drain

LOE ID:	47905
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/5/2008 4:00:00 PM-10/28/2009 4:30:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 36661, Oxygen, Dissolved **Region 3**

Blanco Drain

LOE ID:	14514
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 17 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36661, Oxygen, Dissolved **Region 3**

Blanco Drain

LOE ID:	48045
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 14 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **42839** **Region 3**

Blanco Drain

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Sixty of the 102 samples the evaluation guideline used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty of the 102 samples the evaluation guideline used to interpret the water quality objective for turbidity and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42839, Turbidity **Region 3**

Blanco Drain

LOE ID:	13681
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Blanco Drain to determine beneficial use support and results are as follows: 17 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 2 monitoring sites [Blanco drain at Cooper Rd, Pump station]
Temporal Representation:	Data was collected over the time period 8/29/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42839, Turbidity **Region 3**

Blanco Drain

LOE ID:	48049
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 21 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42839, Turbidity **Region 3**

Blanco Drain

LOE ID:	14669
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	26
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 22 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41507**	**Region 3**
Blanco Drain		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Forty-one of seventy-one samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Zero of three sediment samples exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007). For the sediment samples only, this sample size is insufficient to determine, with

the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Forty-one of seventy-one samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41507, Chlorpyrifos **Region 3**

Blanco Drain

LOE ID:	14036
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Blanco Drain to determine beneficial use support and results are as follows: 39 of 41 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 2 monitoring sites [Blanco drain at Cooper Rd, Pump station]
Temporal Representation:	Data was collected over the time period 7/8/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41507, Chlorpyrifos **Region 3**

Blanco Drain

LOE ID:	15108
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41507, Chlorpyrifos **Region 3**

Blanco Drain

LOE ID:	48040
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41507, Chlorpyrifos — Region 3

Blanco Drain

LOE ID:	15078
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA-COO_DPR - Blanco Drain at Cooper Rd, ca 0.2 mi. S of Nashua Rd, drains to Salinas R.]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41507, Chlorpyrifos — Region 3

Blanco Drain

LOE ID:	53560
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41507, Chlorpyrifos **Region 3**

Blanco Drain

LOE ID:	53415
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**42385**	**Region 3**
Blanco Drain		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of the 70 water samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the 3 sediment sample exceed the evaluation guideline (Ding et al., 2011). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-two of the 70 water samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42385, Diazinon **Region 3**

Blanco Drain

LOE ID:	53584
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42385, Diazinon **Region 3**

Blanco Drain

LOE ID:	53582
Pollutant:	Diazinon

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 42385, Diazinon **Region 3**

Blanco Drain

LOE ID:	15116
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Blanco Drain to determine beneficial use support and results are as follows: 6 of 16 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA-COO_DPR - Blanco Drain at Cooper Rd, ca 0.2 mi. S of Nashua Rd, drains to Salinas R.]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42385, Diazinon **Region 3**

Blanco Drain

LOE ID:	15109
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42385, Diazinon **Region 3**

Blanco Drain

LOE ID:	13887
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Blanco Drain to determine beneficial use support and results are as follows: 11 of 40 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 2 monitoring sites [Blanco drain at Cooper Rd, Pump station]
Temporal Representation:	Data was collected over the time period 7/8/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42385, Diazinon **Region 3**

Blanco Drain

LOE ID:	48041
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **42367** **Region 3**

Blanco Drain

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources

TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fifty-four of the 55 nitrate samples and 36 of the 38 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 1) Dissolved oxygen for this water body ranged from 4.48 mg/L to 22.2 mg/L, rarely exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L. This waterbody frequently exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). This waterbody is listed as impaired for low dissolved oxygen. 2) Floating algal mats ranged from 0 to 100% cover, frequently exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 3.37 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). 4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 80 g/m2 ash-free dry weight (AFDW). This exceeds the Cold water screening threshold of 60 mg/m2, nd is at the Warm water screening threshold for algae biomass of 80 grams/m2 (Creager, et al., 2006). 5) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 199 mg/m2. This exceeds the Cold water screening threshold of 150 mg/m2, but not the Warm water screening threshold of 200 mg/m2 (Creager, et al., 2006). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-four of the 55 nitrate samples and 36 of the 38 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat and this exceed the allowable frequency listed in Table 4.1 of the Listing Policy. There is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42367, Nitrate **Region 3**

Blanco Drain

LOE ID:	48042
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42367, Nitrate **Region 3**

Blanco Drain

LOE ID:	48043
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38

Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 36 of 38 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42367, Nitrate **Region 3**

Blanco Drain

LOE ID:	27851
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth)
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42367, Nitrate **Region 3**

Blanco Drain

LOE ID:	27852
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 2 monitoring sites [Blanco drain at Cooper Rd, Pump station]
Temporal Representation:	Data was collected over the time period 11/12/2001-6/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID 46917 Region 3
Blanco Drain

Pollutant:	**Alachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 samples exceed the evaluation guideline (USEPA national ambient water quality criteria, 2006) used to interpret the narrative water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 samples exceed the evaluation guideline (USEPA national ambient water quality criteria, 2006) used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46917, Alachlor Region 3
Blanco Drain

LOE ID:	53405
Pollutant:	Alachlor

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**36615**	**Region 3**
Blanco Drain		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 43 samples exceed the water quality objective. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ (Decision 11033) to Â‘AmmoniaÂ’ in the 2014 assessment cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 43 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36615, Ammonia **Region 3**

Blanco Drain

LOE ID:	48038
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36615, Ammonia **Region 3**

Blanco Drain

LOE ID:	14499

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**46918**	**Region 3**
Blanco Drain		

Pollutant:	**Atrazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 samples exceed the evaluation guideline (USEPA , 2011) used to interpret the narrative water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if

a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 9 samples exceed the evaluation guideline (USEPA, 2011) used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46918, Atrazine **Region 3**

Blanco Drain

LOE ID:	53407
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life 50% effect concentration (EC50) for Atrazine is 43 ug/L based on a 14 day toxicity study of Duckweed (Lemna gibba).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	46942	Region 3
Blanco Drain		

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three Lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Zero of the water samples had detectible levels of bifenthrin, however the laboratory reporting limits are above the criteria. Therefore, it is impossible to know if the samples did contain bifenthrin at concentrations above the evaluation guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Zero of the water samples had detectible levels of bifenthrin, however the laboratory reporting limits are above the criteria. Neither of these exceedance counts exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46942, Bifenthrin	**Region 3**
Blanco Drain	

LOE ID:	53408
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Bifenthrin.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46942, Bifenthrin **Region 3**

Blanco Drain

LOE ID:	53410
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for BIFENTHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

	average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46942, Bifenthrin **Region 3**

Blanco Drain

LOE ID:	53409
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	46935	Region 3
Blanco Drain		

Pollutant:	**Butylate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 45 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 45 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46935, Butylate	**Region 3**
Blanco Drain	

LOE ID:	53411
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 45 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46919 Region 3

Blanco Drain

Pollutant:	**Carbaryl**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline used to interpret the narrative water quality objective for the protection of aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46919, Carbaryl Region 3

Blanco Drain

LOE ID:	53412
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	46920	Region 3
Blanco Drain		

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 samples exceed the evaluation guideline (USEPA national ambient water quality criteria, 2006) used to interpret the narrative water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 9 samples exceed the evaluation guideline (USEPA national ambient water quality criteria, 2006) used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46920, Carbofuran **Region 3**

Blanco Drain

LOE ID:	53413
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	40409	Region 3
Blanco Drain		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 60 samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 60 samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40409, Chlorophyll-a	**Region 3**
Blanco Drain	

LOE ID:	48039
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40409, Chlorophyll-a **Region 3**

Blanco Drain

LOE ID:	14500
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**46943**	**Region 3**
Blanco Drain		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Zero of the water samples had detectible levels of Cyfluthrin, however the laboratory reporting limits are above the criteria. Therefore, it is impossible to know if the samples did contain Cyfluthrin at concentrations above the evaluation guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Zero of the water samples had detectible levels of Cyfluthrin, however the laboratory reporting limits are above the criteria. Neither of these exceedance counts exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46943, Cyfluthrin **Region 3**

Blanco Drain

LOE ID:	53561
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46943, Cyfluthrin **Region 3**

Blanco Drain

LOE ID:	53562
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	46944	Region 3
Blanco Drain		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three Lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Zero of the water samples had detectible levels of

Lambda Cyhalothrin, however the laboratory reporting limits are above the criteria. Therefore, it is impossible to know if the samples did contain Lambda Cyhalothrin at concentrations above the evaluation guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Zero of the water samples had detectible levels of Lambda Cyhalothrin, however the laboratory reporting limits are above the criteria. Neither of these exceedance counts exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46944, Cyhalothrin, Lambda **Region 3**

Blanco Drain

LOE ID:	53563
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample.

	The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46944, Cyhalothrin, Lambda **Region 3**

Blanco Drain

LOE ID:	53564
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyhalothrin, lambda, total. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46944, Cyhalothrin, Lambda **Region 3**

Blanco Drain

LOE ID:	53565
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**46945**	**Region 3**
Blanco Drain		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3

sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Zero of the water samples had detectible levels of Cypermethrin , however the laboratory reporting limits are above the criteria. Therefore, it is impossible to know if the samples did contain Cypermethrin at concentrations above the evaluation guideline. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Zero of the water samples had detectible levels of Lambda Cypermethrin , however the laboratory reporting limits are above the criteria. Neither of these exceedance counts exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46945, Cypermethrin **Region 3**

Blanco Drain

LOE ID:	53566
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cypermethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3

	ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46945, Cypermethrin **Region 3**

Blanco Drain

LOE ID:	53567
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46945, Cypermethrin **Region 3**

Blanco Drain

LOE ID:	53568
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for CYPERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46948** **Region 3**

Blanco Drain

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing

status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Six lines of evidence are available in the administrative record to assess the DDT isomer. The single water sample did exceed the Evaluation Guideline (California Toxics Rule, 2000) as it applies to public health and consumption of aquatic organisms. Sediment samples were also tested for the DDT isomer and total DDT (the sum of DDD, DDE and DDT isomers). Zero of the six sediment samples exceed the evaluation guidelines (MacDonald et al., 2000) set to protect aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for both water and the sediment samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single water sample did exceed the Evaluation Guideline (California Toxics Rule, 2000) as it applies to public health and consumption of aquatic organisms. Zero of the six sediment samples exceed the evaluation guidelines (MacDonald et al., 2000) set to protect aquatic life. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46948, DDT (Dichlorodiphenyltrichloroethane) Region 3

Blanco Drain

LOE ID:	53577
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-2/15/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46948, DDT (Dichlorodiphenyltrichloroethane) Region 3

Blanco Drain

LOE ID:	53576
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46948, DDT (Dichlorodiphenyltrichloroethane) Region 3

Blanco Drain

LOE ID:	53575
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT(p,p). Eight sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criteria for the protection of human health from consumption of organisms only is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46948, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Blanco Drain

LOE ID:	53574
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT(p,p). Eight sample results were not used in the assessment because the laboratory data reporting

	limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46948, DDT (Dichlorodiphenyltrichloroethane) Region 3

Blanco Drain

LOE ID:	53541
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46948, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Blanco Drain

LOE ID:	53542
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT, Total. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-2/15/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **46921** **Region 3**

Blanco Drain

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples and zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples and zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46921, Deltamethrin **Region 3**

Blanco Drain

LOE ID:	53578
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L

	and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46921, Deltamethrin **Region 3**

Blanco Drain

LOE ID:	53579
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	46950	Region 3
Blanco Drain		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 water samples exceed the evaluation guideline (USEPA National Recommended Water Quality Criteria, 2006) used to interpret the narrative water quality objective. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 water samples exceed the evaluation guideline (USEPA National Recommended Water Quality Criteria, 2006) used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46950, Demeton	**Region 3**
Blanco Drain	

LOE ID:	53580
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46950, Demeton **Region 3**

Blanco Drain

LOE ID:	53581
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46951 Region 3
Blanco Drain

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46951, Dichlorvos Region 3
Blanco Drain

LOE ID:	53587
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46951, Dichlorvos **Region 3**

Blanco Drain

LOE ID:	53585
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.

Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46951, Dichlorvos **Region 3**

Blanco Drain

LOE ID:	53586
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46952 Region 3

Blanco Drain

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46952, Dimethoate Region 3

Blanco Drain

LOE ID:	53588
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46952, Dimethoate **Region 3**

Blanco Drain

LOE ID:	53590
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46952, Dimethoate **Region 3**

Blanco Drain

LOE ID:	53589
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **46955** **Region 3**

Blanco Drain

Pollutant:	**Dyfonate (Fonofos or Fonophos)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 16 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46955, Dyfonate (Fonofos or Fonophos) **Region 3**

Blanco Drain

LOE ID:	53592
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of

Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 46922 Region 3

Blanco Drain

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 25 water samples and zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sediment sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 water samples and zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46922, Esfenvalerate/Fenvalerate Region 3

Blanco Drain

LOE ID:	53593
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46922, Esfenvalerate/Fenvalerate **Region 3**

Blanco Drain

LOE ID:	53594
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46922, Esfenvalerate/Fenvalerate **Region 3**

Blanco Drain

LOE ID:	53595
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	46924	Region 3
Blanco Drain		

Pollutant:	**Ethalfluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46924, Ethalfluralin	**Region 3**
Blanco Drain	

LOE ID:	53596
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 1.4 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L as determined in a 50 day toxicity study with the Bluegill sunfish, Lepomis macrochirus. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46953**	**Region 3**
Blanco Drain		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46953, Ethoprop — Region 3

Blanco Drain

LOE ID:	53458
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46953, Ethoprop — Region 3

Blanco Drain

LOE ID:	53459
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46953, Ethoprop **Region 3**

Blanco Drain

LOE ID:	53460
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**46936**	**Region 3**
Blanco Drain		

Pollutant:	**Fenamiphos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 16 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46936, Fenamiphos **Region 3**

Blanco Drain

LOE ID:	53461
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID **46923** **Region 3**

Blanco Drain

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 9 water samples and zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 9 water samples and zero of the 3 sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46923, Fenpropathrin **Region 3**

Blanco Drain

LOE ID:	53466
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).

Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46923, Fenpropathrin **Region 3**

Blanco Drain

LOE ID:	53467
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46956** **Region 3**

Blanco Drain

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46956, Fipronil **Region 3**

Blanco Drain

LOE ID:	53468
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 65737 Region 3

Blanco Drain

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 65737, Fipronil Sulfide Region 3

Blanco Drain

LOE ID:	53469
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil sulfide.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**65738**	**Region 3**
Blanco Drain		

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 3 sediment samples exceed the evaluation guideline used to interpret the narrative water quality

objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 3 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 65738, Fipronil Sulfone **Region 3**

Blanco Drain

LOE ID:	53474
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco

	Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 46926 Region 3
Blanco Drain

Pollutant:	**Hexazinone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46926, Hexazinone Region 3
Blanco Drain

LOE ID:	53475
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L based on a 120 hour toxicity study of green algae (selenastrum capricornutum).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46957**	**Region 3**
Blanco Drain		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 6 water exceeded the evaluation guideline (UCDavis, 2012) used to interpret the narrative water quality objective for aquatic life protection. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 6 water exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46957, Malathion **Region 3**

Blanco Drain

LOE ID:	53482
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46957, Malathion **Region 3**

Blanco Drain

LOE ID:	53483
Pollutant:	Malathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46957, Malathion **Region 3**

Blanco Drain

LOE ID:	53477
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for MALATHION. Eight sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46957, Malathion **Region 3**

Blanco Drain

LOE ID:	53476
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 46954 Region 3

Blanco Drain

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46954, Methidathion Region 3

Blanco Drain

LOE ID:	53485
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46954, Methidathion **Region 3**

Blanco Drain

LOE ID:	53484
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46949 Region 3

Blanco Drain

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3 sediment samples exceed the evaluation guideline (Ding et al., 2011) used to interpret the narrative water quality objective for the protection of aquatic life. Zero of the 30 water samples exceeded evaluation guideline (CDFG, 1992). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 sediment samples and zero of the 30 water exceeded the evaluation guidelines and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46949, Methyl Parathion Region 3

Blanco Drain

LOE ID:	53493
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46949, Methyl Parathion **Region 3**

Blanco Drain

LOE ID:	53492
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System

Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46949, Methyl Parathion **Region 3**

Blanco Drain

LOE ID:	53491
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46949, Methyl Parathion **Region 3**

Blanco Drain

LOE ID:	53490
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46949, Methyl Parathion **Region 3**

Blanco Drain

LOE ID:	53498
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**46925**	**Region 3**
Blanco Drain		

Pollutant:	**Molinate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46925, Molinate **Region 3**

Blanco Drain

LOE ID:	53499
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46927** **Region 3**

Blanco Drain

Pollutant:	**Napropamide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46927, Napropamide **Region 3**

Blanco Drain

LOE ID:	53500
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]

Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46958 Region 3

Blanco Drain

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Twenty-five water samples were collected, however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of three sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46958, Permethrin, total Region 3

Blanco Drain

LOE ID:	53507

Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46958, Permethrin, total **Region 3**

Blanco Drain

LOE ID:	53509
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support. Sixteen samples were collected however they were all non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46958, Permethrin, total **Region 3**

Blanco Drain

LOE ID:	53508
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for PERMETHRIN. Nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average

	concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46959 Region 3
Blanco Drain

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 water samples exceeded evaluation guideline used to interpret the narrative water quality objective set to protect aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 21 water samples exceeded evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46959, Phorate Region 3
Blanco Drain

LOE ID:	53518
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 6/17/2003-9/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46959, Phorate **Region 3**

Blanco Drain

LOE ID:	53519
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 46959, Phorate **Region 3**

Blanco Drain

LOE ID:	53517
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	46931	Region 3
Blanco Drain		

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46931, Phosmet	**Region 3**
Blanco Drain	

LOE ID:	53520
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46933 Region 3

Blanco Drain

Pollutant:	**Prometryn**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46933, Prometryn Region 3

Blanco Drain

LOE ID:	53528
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46928**	**Region 3**
Blanco Drain		

Pollutant:	**Propanil (DCPA mono- and di-acid degrad)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46928, Propanil (DCPA mono- and di-acid degrad) **Region 3**

Blanco Drain

LOE ID:	53529
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.6 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L, as determined in a 60 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP

	Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	46929	Region 3
Blanco Drain		

Pollutant:	**Propiconazole**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46929, Propiconazole	**Region 3**
Blanco Drain	

LOE ID:	53530
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L) based on a 96 toxicity study of Rainbow trout (Oncorhynchus mykiss).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**46930**	**Region 3**
Blanco Drain		

Pollutant:	**Simazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation:	pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46930, Simazine **Region 3**

Blanco Drain

LOE ID:	53531
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **46932** **Region 3**

Blanco Drain

Pollutant:	**Thiobencarb/Bolero**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46932, Thiobencarb/Bolero **Region 3**

Blanco Drain

LOE ID:	53540
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.0 ug/L and the no observed effect concentration (NOEC) of 1.0 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 46934 Region 3

Blanco Drain

Pollutant:	**Trifluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the Beneficial use rating is set to Â‘insufficient informationÂ’ for the sediment samples. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46934, Trifluralin Region 3

Blanco Drain

LOE ID:	53554
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.18 ug/L and the no observed effect concentration (NOEC) of 1.14 ug/L as determined in a 48 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**36922**	**Region 3**
Blanco Drain		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Three beneficial uses are assessed. Eight of the 70 samples exceed the water quality objectives for Recreation and 2 of the 70 samples exceed the water quality objective for Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 70 samples exceed the water quality objectives for Recreation and 2 of the 70 samples exceed the water quality objectives for Warm Freshwater Habitats. These exceedance counts do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36922, pH **Region 3**

Blanco Drain

LOE ID:	14668
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36922, pH **Region 3**

Blanco Drain

LOE ID:	47908
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/5/2008 4:00:00 PM-10/28/2009 4:30:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 36922, pH **Region 3**

Blanco Drain

LOE ID:	47907
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/5/2008 4:00:00 PM-10/28/2009 4:30:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 36922, pH **Region 3**

Blanco Drain

LOE ID:	48048
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36922, pH **Region 3**

Blanco Drain

LOE ID:	48046
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36922, pH **Region 3**

Blanco Drain

LOE ID:	48047
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36922, pH **Region 3**

Blanco Drain

LOE ID:	14666
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36922, pH **Region 3**

Blanco Drain

LOE ID:	14667
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36922, pH **Region 3**

Blanco Drain

LOE ID:	47906
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Blanco Drain to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain]
Temporal Representation:	Data was collected over the time period 1/5/2008 4:00:00 PM-10/28/2009 4:30:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**46946**	**Region 3**
Blanco Drain		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. All three of the water samples exceed the Evaluation Guideline (California Toxics Rule, 2000) as it applies to public health and consumption of aquatic organism. Five of the 6 sediment samples exceed the evaluation guideline (MacDonald et al., 2000) set to protect aquatic life. Four of six sediment toxicity tests resulted in significant toxic effects to the invertebrate test organism relative to the control samples. Blanco Drain is being added to the 303(d) List for toxicity in sediment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All three of the water samples exceed the Evaluation Guideline (California Toxics Rule, 2000) as it applies to public health and consumption of aquatic organism. Five of the 6 sediment samples exceed the evaluation guideline (MacDonald et al., 2000) set to protect aquatic life. Four of six sediment toxicity tests resulted in significant toxic effects to the invertebrate test organism relative to the control samples. Each of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 46946, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Blanco Drain

LOE ID:	23626
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 4/13/2005-5/24/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46946, DDD (Dichlorodiphenyldichloroethane) Region 3

Blanco Drain

LOE ID:	53570
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46946, DDD (Dichlorodiphenyldichloroethane) Region 3

Blanco Drain

LOE ID:	53569
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for DDD(p,p). Six sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD criteria for the protection of human health from consumption of organisms only is 0.00084 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46946, DDD (Dichlorodiphenyldichloroethane) Region 3

Blanco Drain

LOE ID:	53552
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in samples collected on 0/30/2008 and 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

	that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Station 309BLA - Blanco Drain at old pump house.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46946, DDD (Dichlorodiphenyldichloroethane) Region 3

Blanco Drain

LOE ID:	53571
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for DDD. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-2/15/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46946, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Blanco Drain

LOE ID:	59004
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Significant toxicity to Hyalella azteca was reported for samples collected on 4/5/07 and 4/17/09. It should be noted that the samples collected in 2006, that were in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	A significant effect is determined by a statistical test.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at Blanco Drain (309BLA).
Temporal Representation:	The samples were collected from annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Comments on the 2010 Integrated Report for Ormond Beach and Calleguas Creek. Oxnard, CA: City of Oxnard, Public Works Department

DECISION ID **46947** **Region 3**

Blanco Drain

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. Six of the 6 sediment samples exceed the evaluation guideline (MacDonald et al., 2000) set to protect aquatic life. Four of six sediment toxicity tests resulted in significant toxic effects to the invertebrate test organism relative to the control samples. Blanco Drain is being added to the 303(d) List for toxicity in sediment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 6 sediment samples exceed the evaluation guideline (MacDonald et al., 2000) set to protect aquatic life. Four of six sediment toxicity tests resulted in significant toxic effects to the invertebrate test organism relative to the control samples. Blanco Drain is being added to the 303(d) List for toxicity in sediment. Each of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 46947, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Blanco Drain

LOE ID:	59004
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Significant toxicity to Hyalella azteca was reported for samples collected on 4/5/07 and 4/17/09. It should be noted that the samples collected in 2006, that were in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	A significant effect is determined by a statistical test.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064
Spatial Representation:	The samples were collected at Blanco Drain (309BLA).
Temporal Representation:	The samples were collected from annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Comments on the 2010 Integrated Report for Ormond Beach and Calleguas Creek. Oxnard, CA: City of Oxnard, Public Works Department

Line of Evidence (LOE) for Decision ID 46947, DDE (Dichlorodiphenyldichloroethylene) Region 3

Blanco Drain

LOE ID:	53572
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46947, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Blanco Drain

LOE ID:	53552
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in samples collected on 0/30/2008 and 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Station 309BLA - Blanco Drain at old pump house.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 46947, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Blanco Drain

LOE ID:	53573
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Blanco Drain to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for DDE. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [Blanco Drain - 309BLA]
Temporal Representation:	Data was collected over the time period 1/5/2008-2/15/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 46947, DDE (Dichlorodiphenyldichloroethylene) Region 3

Blanco Drain

LOE ID:	23626
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 4/13/2005-5/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42954**	**Region 3**
Blanco Drain		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Three LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and six additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in sediment samples. Four of the eight sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. Five LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twenty additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-seven total samples are available to assess toxic effects in water samples. Fourteen

of the twenty-seven water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fourteen of the 27 water samples resulted in significant toxic effects to one or more test organism relative to the control and four of the eight sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42954, Toxicity **Region 3**

Blanco Drain

LOE ID:	23632
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42954, Toxicity **Region 3**

Blanco Drain

LOE ID:	23631
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42954, Toxicity **Region 3**

Blanco Drain

LOE ID:	23624
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Blanco Drain to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42954, Toxicity **Region 3**

Blanco Drain

LOE ID:	23626
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Blanco Drain to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Blanco Drain was collected at 1 monitoring site [309BLA - Blanco Drain below pump]
Temporal Representation:	Data was collected over the time period 4/13/2005-5/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42954, Toxicity **Region 3**

Blanco Drain

LOE ID:	53543
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Six of the nine samples exhibited significant toxicity. The toxicity tests included survival of Hyalella azteca and survival of Ceriodaphnia dubia for four samples and survival of Ceriodaphnia dubia only for five samples. Statistically significant effects on Hyalella azteca were observed in the sample from 4/29/2008 and significant effects on Ceriodaphnia dubia were observed in five samples 1/5/08, 2/24/2008,10/14/09, 10/22/09 and 2/15/09.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309BLA - Blanco Drain at old pump house.
Temporal Representation:	The samples were collected between January 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42954, Toxicity **Region 3**

Blanco Drain

LOE ID:	53553
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Seven of the 11 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Significant toxicity to Ceriodaphnia dubia survival and reproduction occured in samples from 2/23/08, 9/30/08, 2/6/09, 8/26/09, 9/30/09, and 1/20/10. Significant toxicity to Pimephales promelas growth occured in the sample from 10/24/07. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at Blanco Drain (309BLA).
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Comments on the 2010 Integrated Report for Ormond Beach and Calleguas Creek. Oxnard, CA: City of Oxnard, Public Works Department

Line of Evidence (LOE) for Decision ID 42954, Toxicity **Region 3**

Blanco Drain

LOE ID:	53552
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in samples collected on 0/30/2008 and 10/28/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Station 309BLA - Blanco Drain at old pump house.
Temporal Representation:	The samples were collected in July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42954, Toxicity **Region 3**

Blanco Drain

LOE ID:	59004
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Significant toxicity to Hyalella azteca was reported for samples collected on 4/5/07 and 4/17/09. It should be noted that the samples collected in 2006, that were in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	A significant effect is determined by a statistical test.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064

Spatial Representation:	The samples were collected at Blanco Drain (309BLA).
Temporal Representation:	The samples were collected from annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Comments on the 2010 Integrated Report for Ormond Beach and Calleguas Creek. Oxnard, CA: City of Oxnard, Public Works Department

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Tembladero Slough**
Water Body ID: **CAR3091101019981209131830**
Water Body Type: **River & Stream**

DECISION ID **33166** **Region 3**
Tembladero Slough

Pollutant: **Ammonia**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant unionized ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Ten of the 162 samples exceed the water quality objective for unionized ammonia set to protect aquatic life.

The original listing decision, made in 2006, was based on flaws in the data contained in LOE#1873. The original (and incorrect) LOE is replaced by LOEs # 10011 and #9994. Therefore, LOE #1873 is not included in this assessment. LOE #1873 should be retired. The water segment - pollutant combination was removed from the CWA section 303(d) List in the 2010 assessment cycle. Additionally, newer data in the current listing period reflect that the water quality objectives are being met.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 162 samples exceed the water quality objective for unionized ammonia and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 33166, Ammonia **Region 3**
Tembladero Slough

LOE ID: 58589

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 5 of 33 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33166, Ammonia **Region 3**

Tembladero Slough

LOE ID:	52418
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section

	II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33166, Ammonia **Region 3**

Tembladero Slough

LOE ID:	52417
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33166, Ammonia **Region 3**

Tembladero Slough

LOE ID:	10011
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33166, Ammonia **Region 3**

Tembladero Slough

LOE ID:	14506
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33166, Ammonia **Region 3**

Tembladero Slough

LOE ID:	9994
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 3 of 54 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 32537 Region 3

Tembladero Slough

Pollutant:	**Nutrients**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed under this pollutant name. Staff recommend removing Tembladero Slough from the CWA section 303(d) List for the generic pollutant name "nutrients" and replacement of this decision with individual assessments for of each of the pollutants such as Nitrate, Nitrite and Ammonia.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this generic pollutant name is being replaced by several specific decisions for the individual pollutants.

Line of Evidence (LOE) for Decision ID 32537, Nutrients Region 3

Tembladero Slough

LOE ID:	4016
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 32538 Region 3

Tembladero Slough

Pollutant:	**Pesticides**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Reason for Delisting:	Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed under this pollutant name. Staff recommend removing Tembladero Slough from the CWA section 303(d) List for the generic pollutant name "pesticides" and assessment of each of the individual pollutants separately. Several classes of pesticides, both currently applied and legacy chemicals are assessed individually for this water segment.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this generic pollutant name is being replaced by several specific decisions for the individual pollutants.

Line of Evidence (LOE) for Decision ID 32538, Pesticides Region 3

Tembladero Slough

LOE ID:	4017
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	39116	Region 3
Tembladero Slough		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Five LOEs summarize sediment samples. Three sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and five additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in sediment samples. Eight of the eight sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Ten LOEs summarize water samples. Twelve water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-three total samples are available to assess toxic effects in water samples. Thirteen of the twenty-three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

It should be noted that a TMDL for toxicity in water has been completed and approved by RWQCB and USEPA (The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL, approved by USEPA on October 7, 2011) and is expected to result in attainment of the standard. However, there is not yet an approved TMDL that addresses the sediment toxicity.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eight of the eight sediment samples and 13 of the 23 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	58667
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to the survival of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 309TDWxxx.
Temporal Representation:	The sample was collected in July 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	58668
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. One of the sample exhibited significant toxicity to the survival of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 309TDW - Tembladero Slough at Molera Road.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	58670
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One

	sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309TEH-Tembladero Slough at Haro Road.
Temporal Representation:	The samples were collected annualy in April, 2007 - 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	58669
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Six of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The six samples that exhibited toxicity were to Ceriodaphnia dubia were collected on the following dates: 1/27/08, 2/22/08, 10/1/08, 1/27/09, 2/6/09 and 1/20/10). The samples were not toxic to other test organisms. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309TEH-Tembladero Slough at Haro Road.
Temporal Representation:	The samples were collected between October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	24643
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]

Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	24648
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TDW-Tembladero Slough at Molera Road, 309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/15/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	24649
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity — Region 3

Tembladero Slough

LOE ID:	24650
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity — Region 3

Tembladero Slough

LOE ID:	24646
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TDW-Tembladero Slough at Molera Road, 309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 6/15/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	24647
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	26393
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Fish Migration

Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia survival %. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TDW-Tembladero Slough at Molera Road and 309TEM - Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected between 6/15/06 - 2/14/07. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	None
QAPP Information:	SWAMP QAPP (Puckett, M. 2002)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	24638
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint

	when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	24642
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 4/12/2005-5/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	24641
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca sediment 10-day survival %. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected on a single day 2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39116, Toxicity **Region 3**

Tembladero Slough

LOE ID:	24789
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for

	all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	39813	Region 3
Tembladero Slough		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Three hundred fourteen (314) of the 338 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three hundred fourteen (314) of the 338 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39813, Turbidity	Region 3

Tembladero Slough

LOE ID:	12833
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 13 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 4/26/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39813, Turbidity **Region 3**

Tembladero Slough

LOE ID:	12546
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	50

Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 50 of 50 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39813, Turbidity **Region 3**

Tembladero Slough

LOE ID:	12563
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39813, Turbidity **Region 3**

Tembladero Slough

LOE ID:	15315
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	159
Number of Exceedances:	142
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Tembladero Slough to determine beneficial use support and results are as follows: 142 of 159 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough@preston, 309TEMMOL - Tembladero Slough 2]
Temporal Representation:	Data was collected over the time period 6/13/1994-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place

	and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39813, Turbidity **Region 3**

Tembladero Slough

LOE ID:	14526
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 25 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39813, Turbidity **Region 3**

Tembladero Slough

LOE ID:	58671
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 31 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Shoup, D.E. and D.H. Wahl (2009) states that largemouth bass had more difficulty in capturing rapidly moving fish prey at 40 NTU and the overall foraging rate was much lower.
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39813, Turbidity **Region 3**

Tembladero Slough

LOE ID:	52970
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 9 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39813, Turbidity **Region 3**

Tembladero Slough

LOE ID:	52449
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 40 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39813, Turbidity **Region 3**

Tembladero Slough

LOE ID:	52450
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36784** **Region 3**

Tembladero Slough

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Thirty lines of evidence are available in the administrative record to assess this pollutant. Three beneficial uses are assessed. Ninety-three of the 348 samples exceed the water quality objectives for

Warm Freshwater Habitat, and 159 of the 348 samples exceed the water quality objectives for Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ninety-three of the 348 samples exceed the water quality objectives for Warm Freshwater Habitat, and 159 of the 348 samples exceed the water quality objectives for Recreation and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	52412
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	52438
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	52448
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	52411
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 10 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	52408
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	52407
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 10 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	52955
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 11 of 14 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	52940
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 14 of 14 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	52947
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows:

	14 of 14 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	58663
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 17 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36784, pH — Region 3

Tembladero Slough

LOE ID:	58662
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	33
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 17 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36784, pH — Region 3

Tembladero Slough

LOE ID:	58661
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 10 of 33 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	19010
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 4 monitoring sites [309-TEMBL-31 - Tembladero Creek, 309-TEMBL-32 - Tembladero Slough Hwy 183, 309-TEMBL-33 - Tembladero Slough at Preston Bridge, 309-TEMBL-34 - Upper Tembladero Cr at Anderson Property]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	19011
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 4 monitoring sites [309-TEMBL-31 - Tembladero Creek, 309-TEMBL-32 - Tembladero Slough Hwy 183, 309-TEMBL-33 - Tembladero Slough at Preston Bridge, 309-TEMBL-34 - Upper Tembladero Cr at Anderson Property]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	18993
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 4 monitoring sites [309-TEMBL-31 - Tembladero Creek, 309-TEMBL-32 - Tembladero Slough Hwy 183, 309-TEMBL-33 - Tembladero Slough at Preston Bridge, 309-TEMBL-34 - Upper Tembladero Cr at Anderson Property]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	15322
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	151
Number of Exceedances:	86
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Tembladero Slough to determine beneficial use support and results are as follows: 86 of 151 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough@preston, 309TEMMOL - Tembladero Slough 2]
Temporal Representation:	Data was collected over the time period 6/13/1994-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	15323
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	151
Number of Exceedances:	86
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Tembladero Slough to determine beneficial use support and results are as follows: 86 of 151 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough@preston, 309TEMMOL - Tembladero Slough 2]
Temporal Representation:	Data was collected over the time period 6/13/1994-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	15324

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	151
Number of Exceedances:	54
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Tembladero Slough to determine beneficial use support and results are as follows: 54 of 151 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough@preston, 309TEMMOL - Tembladero Slough 2]
Temporal Representation:	Data was collected over the time period 6/13/1994-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	14523
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and

	results are as follows: 5 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	14524
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 5 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	14525
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH — Region 3

Tembladero Slough

LOE ID:	11003
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 21 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH — Region 3

Tembladero Slough

LOE ID:	11004
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	10

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 10 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	10839
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	10823
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	10840
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	10784
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56

Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 21 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	10799
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TDW-Tembladero Slough at Molera Road, 309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	10800
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TDW-Tembladero Slough at Molera Road, 309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36784, pH **Region 3**

Tembladero Slough

LOE ID:	10801
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TDW-Tembladero Slough at Molera Road, 309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39521** **Region 3**

Tembladero Slough

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Sixty-seven of the 267 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-seven of the 267 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a **Region 3**

Tembladero Slough

LOE ID:	58594
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A ? Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a **Region 3**

Tembladero Slough

LOE ID:	52420
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a — Region 3

Tembladero Slough

LOE ID:	52419
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 15 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a — Region 3

Tembladero Slough

LOE ID:	52932
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a **Region 3**

Tembladero Slough

LOE ID:	52827
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a **Region 3**

Tembladero Slough

LOE ID:	9996
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	63
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 13 of 63 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a **Region 3**

Tembladero Slough

LOE ID:	12560
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a **Region 3**

Tembladero Slough

LOE ID:	14507
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a **Region 3**

Tembladero Slough

LOE ID:	15254
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Tembladero Slough to determine beneficial use support and results are as follows: 10 of 44 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural

	Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough@preston, 309TEMMOL - Tembladero Slough 2]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39521, Chlorophyll-a **Region 3**

Tembladero Slough

LOE ID:	10009
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 15 of 26 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 3/29/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42573**	**Region 3**
Tembladero Slough		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Four of the seven water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). Two of two sediment samples (pore water) exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. For the sediment matrix, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four of the seven samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42573, Chlorpyrifos **Region 3**

Tembladero Slough

LOE ID:	15205
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42573, Chlorpyrifos **Region 3**

Tembladero Slough

LOE ID:	14055
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [Molera Rd, Tembladero Slough at Haro Rd..Site coordinates are for Preston Rd. Haro Rd. appears to be in the city of Castroville and close to the Slough.]
Temporal Representation:	Data was collected on a single day 7/1/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42573, Chlorpyrifos **Region 3**

Tembladero Slough

LOE ID:	47729
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42573, Chlorpyrifos **Region 3**

Tembladero Slough

LOE ID:	16296
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42573, Chlorpyrifos **Region 3**

Tembladero Slough

LOE ID:	58601
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42573, Chlorpyrifos **Region 3**

Tembladero Slough

LOE ID:	58600
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42561	Region 3
Tembladero Slough		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. The decision for the 2010 303(d) list used 0.16 ug/L (Siepmann and Finlayson, 2000) as the evaluation guideline. The evaluation guideline now being used is 0.1 ug/L (Finlayson, 2004). Seven of the seven samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). Two of two sediment samples (pore water) exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Seven of seven samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of

the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42561, Diazinon **Region 3**

Tembladero Slough

LOE ID:	58628
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42561, Diazinon **Region 3**

Tembladero Slough

LOE ID:	58627
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42561, Diazinon **Region 3**

Tembladero Slough

LOE ID:	15219
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42561, Diazinon **Region 3**

Tembladero Slough

LOE ID:	47676
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42561, Diazinon **Region 3**

Tembladero Slough

LOE ID:	13638
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [Molera Rd, Tembladero Slough at Haro Rd..Site coordinates are for Preston Rd. Haro Rd. appears to be in the city of Castroville and close to the Slough.]
Temporal Representation:	Data was collected on a single day 7/1/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42561, Diazinon **Region 3**

Tembladero Slough

LOE ID:	16707
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37630**	**Region 3**
Tembladero Slough		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Sixty-two of 104 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 63 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-two of 104 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) **Region 3**

Tembladero Slough

LOE ID:	14011
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM_CCL - TEM_CCL]
Temporal Representation:	Data was collected over the time period 1/27/2004-6/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) Region 3

Tembladero Slough

LOE ID:	18295
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Tembladero Slough to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 4 monitoring sites [309-TEMBL-31 - Tembladero Creek, 309-TEMBL-32 - Tembladero Slough Hwy 183, 309-TEMBL-33 - Tembladero Slough at Preston Bridge, 309-TEMBL-34 - Upper Tembladero Cr at Anderson Property]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) Region 3

Tembladero Slough

LOE ID:	10802
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 15 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/11/2005-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) Region 3

Tembladero Slough

LOE ID:	14010
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Tembladero Slough to determine beneficial use support and results are as follows: 10 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM_CCL - TEM_CCL]
Temporal Representation:	Data was collected over the time period 1/27/2004-6/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) **Region 3**

Tembladero Slough

LOE ID:	10803
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/11/2005-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) **Region 3**

Tembladero Slough

LOE ID:	18296
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 4 monitoring sites [309-TEMBL-31 - Tembladero Creek, 309-TEMBL-32 - Tembladero Slough Hwy 183, 309-TEMBL-33 - Tembladero Slough at Preston Bridge, 309-TEMBL-34 - Upper Tembladero Cr at Anderson Property]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) Region 3

Tembladero Slough

LOE ID:	10821
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) Region 3

Tembladero Slough

LOE ID:	10822
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) **Region 3**

Tembladero Slough

LOE ID:	52405
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	21
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 21 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37630, Escherichia coli (E. coli) **Region 3**

Tembladero Slough

LOE ID:	52406
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**33543**	**Region 3**
Tembladero Slough		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Seventy of 117 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 12 of 117 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy of 117 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA on 01/31/2012.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33543, Fecal Coliform **Region 3**

Tembladero Slough

LOE ID:	52410
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33543, Fecal Coliform **Region 3**

Tembladero Slough

LOE ID:	52409
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33543, Fecal Coliform **Region 3**

Tembladero Slough

LOE ID:	52403
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	24
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 24 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33543, Fecal Coliform **Region 3**

Tembladero Slough

LOE ID:	52404
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33543, Fecal Coliform **Region 3**

Tembladero Slough

LOE ID:	10819
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 15 of 20 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 4/26/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33543, Fecal Coliform **Region 3**

Tembladero Slough

LOE ID:	10783
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 8 of 56 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33543, Fecal Coliform **Region 3**

Tembladero Slough

LOE ID:	10820
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Coliform, Fecal. This LOE contains all the data assessed in LOE #1872 (the basis for the 2006 listing). The current LOE replaces the previous LOE which erroneously included field duplicate samples in the exceedance count.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 4/26/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any conditions that may affect thsi assessment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33543, Fecal Coliform **Region 3**

Tembladero Slough

LOE ID:	10782
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	31
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 31 of 56 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42856	Region 3
Tembladero Slough		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Fourteen LOEs summarize nitrate or nitrate/nitrate data and 351 of the 354 nitrate samples exceed Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). In addition, 66 samples of the 66 nitrate/nitrite samples exceed the evaluation guideline. The following supporting evidence indicates occurrence of eutrophication conditions (such as low dissolved oxygen or elevated chlorophyll a concentrations). 1. In the 2014 assessment cycle, staff recommend adding this water segment to the 303(d) List due to low dissolved oxygen. Four LOEs are included in this decision. Dissolved oxygen measurements for this water body ranged from 2.77 mg/L to 17.38 mg/L, frequently exceeding (falling below) the

Spawning Freshwater Habitat water quality objective of 7.0 mg/L and occasionally exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L . The dissolved oxygen upper screening level of 13.0 mg/L (R3 NNE Technical Report, 2010) was also frequently exceeded.
2. In the 2014 assessment cycle, staff recommend adding this water segment to the 303(d) List due to elevated chlorophyll a concentrations (exceed the evaluation guideline of 40 ug/L). Ten chlorophyll a LOEs are included in this decision. Water column chlorophyll a concentrations ranged from zero and peaked at 200 ug/L, frequently exceeding the screening threshold (R3 NNE Technical Report, 2010).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 351 of the 354 nitrate samples and 66 samples of the 66 nitrate/nitrite samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration and the protection of aquatic life uses and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. In addition, there is evidence of eutrophic conditions in this water segment and staff propose to add it to the 303(d) List for both low dissolved oxygen and elevated chlorophyll a.
4. The Lower Salinas River Watershed Nutrient TMDL was approved by USEPA.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	28149
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 4 monitoring sites [309-TEMBL-31 - Tembladero Creek, 309-TEMBL-32 - Tembladero Slough at Hwy 183, 309-TEMBL-33 - Tembladero Slough at Preston Rd. Bridge, 309-TEMBL-34 - Upper Tembladero at Anderson Property].
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	9996
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	63
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 13 of 63 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	28131
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	136
Number of Exceedances:	133
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: National Estuarine Research Reserve Monitoring Program (R3_ESNERR). Monitoring was conducted approximately monthly and 133 of 136 samples exceed the evaluation guideline.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 3 monitoring sites [309TEMPRS - Tembladero Slough@preston, 309TEMMOL - Tembladero Slough 2, 309TEMMDW - Tembladero Slough@ Molera and Dunes Way]
Temporal Representation:	Data was collected over the time period 6/13/1994-12/4/2006. Monitoring was conducted approximately monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	12560
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer

	months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	28161
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [Molera Rd, Tembladero Slough at Haro Rd..Site coordinates are for Preston Rd. Haro Rd. appears to be in the city of Castroville and close to the Slough.]
Temporal Representation:	Data was collected over the time period 11/12/2001-7/1/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	14507
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	28130
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	56
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Coastal Confluences). All 56 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	28162
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Long

	Term Environmental Assessment Program (R3_CCLEAN)
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM_CCL - TEM_CCL]
Temporal Representation:	Data was collected over the time period 6/28/2004-6/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	28129
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Salinas). All 23 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 3/29/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. CCAMP has monitored this site monthly in both 1999 and in 2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	15254
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Tembladero Slough to determine beneficial use support and results are as follows: 10 of 44 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough@preston, 309TEMMOL - Tembladero Slough 2]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	28112
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Southern Area Ag-Waiver Monitoring (R3_CMPNorth). All 9 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region

	IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	10009
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 15 of 26 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 3/29/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52419
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 15 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52416
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52415
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	41
Number of Exceedances:	12

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 12 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52932
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52858
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 3/5/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52433
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected on a single day 2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52897
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52854
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	62

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 62 of 62 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52423
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52420
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52421
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	41
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 41 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [

	309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52422
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42856, Nitrate — Region 3

Tembladero Slough

LOE ID:	58594
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A ? Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42856, Nitrate — Region 3

Tembladero Slough

LOE ID:	58656
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	58658
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	33
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 3 of 33 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin

	Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42856, Nitrate **Region 3**

Tembladero Slough

LOE ID:	52827
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

DECISION ID 37404 Region 3

Tembladero Slough

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Illegal dumping | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One hundred and eighty (180) of the 180 samples exceed the water quality objective for consumption of shellfish (shellfish harvesting). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred and eighty (180) of the 180 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 37404, Total Coliform Region 3

Tembladero Slough

LOE ID:	52413
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Coliform, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37404, Total Coliform **Region 3**

Tembladero Slough

LOE ID:	52414
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37404, Total Coliform **Region 3**

Tembladero Slough

LOE ID:	13992
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	14
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Tembladero Slough to determine beneficial use support and results are as follows: 14 of 14 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM_CCL - TEM_CCL]
Temporal Representation:	Data was collected over the time period 1/27/2004-6/27/2005.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37404, Total Coliform **Region 3**

Tembladero Slough

LOE ID:	10010
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	32
Number of Exceedances:	32
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 32 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 4/26/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37404, Total Coliform **Region 3**

Tembladero Slough

LOE ID:	17438
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Tembladero Slough to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 4 monitoring sites [309-TEMBL-31 - Tembladero Creek, 309-TEMBL-32 - Tembladero Slough Hwy 183, 309-TEMBL-33 - Tembladero Slough at Preston Bridge, 309-TEMBL-34 - Upper Tembladero Cr at Anderson Property]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37404, Total Coliform **Region 3**

Tembladero Slough

LOE ID:	9995
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	81
Number of Exceedances:	81
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 81 of 81 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36677**	**Region 3**
Tembladero Slough		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36677, Arsenic **Region 3**

Tembladero Slough

LOE ID:	15688
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36677, Arsenic **Region 3**

Tembladero Slough

LOE ID:	58590
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51612**	**Region 3**
Tembladero Slough		

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this sample also resulted in a significant toxic effect to invertebrate test organisms (LOE 58667). However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the evaluation guidelines for aquatic life uses, but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51612, Bifenthrin **Region 3**

Tembladero Slough

LOE ID:	58591
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51612, Bifenthrin **Region 3**

Tembladero Slough

LOE ID:	58667
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to the survival of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 309TDWxxx.
Temporal Representation:	The sample was collected in July 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID **36676** **Region 3**

Tembladero Slough

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36676, Cadmium **Region 3**

Tembladero Slough

LOE ID:	58592
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36676, Cadmium **Region 3**

Tembladero Slough

LOE ID:	15473
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	51800	Region 3
Tembladero Slough		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51800, Chlordane	**Region 3**
Tembladero Slough	

LOE ID:	58593
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36822** **Region 3**

Tembladero Slough

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36822, Chromium **Region 3**

Tembladero Slough

LOE ID:	58602
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36822, Chromium **Region 3**

Tembladero Slough

LOE ID:	15915
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37061**	**Region 3**
Tembladero Slough		

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline applied to protect the aquatic life beneficial use.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37061, Copper Tembladero Slough **Region 3**

LOE ID:	16083
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37061, Copper Tembladero Slough **Region 3**

LOE ID:	58603
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51613 **Region 3**

Tembladero Slough

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51613, Cyfluthrin **Region 3**

Tembladero Slough

LOE ID:	58610
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51615**	**Region 3**
Tembladero Slough		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51615, Cyhalothrin, Lambda **Region 3**

Tembladero Slough

LOE ID:	58611
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51616** **Region 3**

Tembladero Slough

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51616, Cypermethrin **Region 3**

Tembladero Slough

LOE ID:	58612
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53042 Region 3

Tembladero Slough

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline for the protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53042, DDD (Dichlorodiphenyldichloroethane) Region 3

Tembladero Slough

LOE ID:	58613
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53043** **Region 3**

Tembladero Slough

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline for the protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53043, DDE (Dichlorodiphenyldichloroethylene) Region 3

Tembladero Slough

LOE ID:	58615
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53044 Region 3

Tembladero Slough

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single DDT isomer sample did exceed the evaluation guideline for the protection of aquatic life. The single Total DDT sample did not exceed the evaluation guideline for the protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample DDT isomer sample did exceed the evaluation guideline but the total DDT sample did not exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53044, DDT (Dichlorodiphenyltrichloroethane) Region 3

Tembladero Slough

LOE ID:	58616
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53044, DDT (Dichlorodiphenyltrichloroethane) Region 3

Tembladero Slough

LOE ID:	58666
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51617**	**Region 3**
Tembladero Slough		

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51617, Deltamethrin	**Region 3**
Tembladero Slough	

LOE ID:	58617
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51838**	**Region 3**
Tembladero Slough		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of five water samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of five water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51838, Demeton **Region 3**

Tembladero Slough

LOE ID:	58626
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51838, Demeton **Region 3**

Tembladero Slough

LOE ID:	58618
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **51847** **Region 3**

Tembladero Slough

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of five water samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of five water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51847, Dichlorvos **Region 3**

Tembladero Slough

LOE ID:	58637
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51847, Dichlorvos **Region 3**

Tembladero Slough

LOE ID:	58629
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

	Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 42639 Region 3

Tembladero Slough

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42639, Dieldrin Region 3

Tembladero Slough

LOE ID:	58638

Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42639, Dieldrin **Region 3**

Tembladero Slough

LOE ID:	16759
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**51856**	**Region 3**
Tembladero Slough		

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of five water samples exceeded the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of five water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51856, Dimethoate **Region 3**

Tembladero Slough

LOE ID:	58639
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51856, Dimethoate **Region 3**

Tembladero Slough

LOE ID:	58640
Pollutant:	Dimethoate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42571**	**Region 3**
Tembladero Slough		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42571, Endrin **Region 3**

Tembladero Slough

LOE ID:	58642
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42571, Endrin **Region 3**

Tembladero Slough

LOE ID:	16369
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51618** **Region 3**

Tembladero Slough

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing

status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this sample also resulted in a significant toxic effect to invertebrate test organisms (LOE 58667). However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did exceed the evaluation guidelines for aquatic life uses, but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51618, Esfenvalerate/Fenvalerate **Region 3**

Tembladero Slough

LOE ID:	58667
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to the survival of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the

	control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 309TDWxxx.
Temporal Representation:	The sample was collected in July 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 51618, Esfenvalerate/Fenvalerate **Region 3**

Tembladero Slough

LOE ID:	58643
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	51896	Region 3
Tembladero Slough		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of five water samples exceeded the evaluation guideline applied to protect for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of five water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51896, Ethoprop	**Region 3**
Tembladero Slough	

LOE ID:	58645
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 51896, Ethoprop **Region 3**

Tembladero Slough

LOE ID:	58644
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that

	adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**51619**	**Region 3**
Tembladero Slough		

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51619, Fenpropathrin **Region 3**

Tembladero Slough

LOE ID:	58646
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36976** **Region 3**

Tembladero Slough

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36976, Lead **Region 3**

Tembladero Slough

LOE ID:	17166
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36976, Lead Tembladero Slough **Region 3**

LOE ID:	58647
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51996	Region 3
Tembladero Slough		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51996, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	**Region 3**
Tembladero Slough	

LOE ID:	58648
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36977** **Region 3**

Tembladero Slough

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36977, Mercury **Region 3**

Tembladero Slough

LOE ID:	58651
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36977, Mercury **Region 3**

Tembladero Slough

LOE ID:	17251
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52061**	**Region 3**
Tembladero Slough		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of

five water samples exceeded the evaluation guideline for the aquatic life beneficial uses. The single sediment sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52061, Methyl Parathion **Region 3**

Tembladero Slough

LOE ID:	58653
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [

	Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52061, Methyl Parathion **Region 3**

Tembladero Slough

LOE ID:	58654
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52061, Methyl Parathion **Region 3**

Tembladero Slough

LOE ID:	58652

Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**52098**	**Region 3**
Tembladero Slough		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment samples did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment samples did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52098, PCBs (Polychlorinated biphenyls) Region 3

Tembladero Slough

LOE ID:	58659
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 309TDWxxx (309TDW-Tembladero Slough at Molera Road).
Temporal Representation:	The samples were collected on 7/21/2008.

Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51620 Region 3

Tembladero Slough

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51620, Permethrin, total Region 3

Tembladero Slough

LOE ID:	58660
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**52153**	**Region 3**
Tembladero Slough		

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of five water samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of five water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52153, Phorate **Region 3**

Tembladero Slough

LOE ID:	58665
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52153, Phorate **Region 3**

Tembladero Slough

LOE ID:	58664

Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**36883**	**Region 3**
Tembladero Slough		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two

sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36883, Zinc **Region 3**

Tembladero Slough

LOE ID:	17735
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36883, Zinc **Region 3**

Tembladero Slough

LOE ID:	58672
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52008** **Region 3**

Tembladero Slough

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two out of five water samples exceeded the evaluation guideline applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of five water samples exceeded the evaluation guideline set to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52008, Malathion **Region 3**

Tembladero Slough

LOE ID:	58650
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day

	average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 2/15/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52008, Malathion **Region 3**

Tembladero Slough

LOE ID:	58649
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	36924	Region 3
Tembladero Slough		

Pollutant:	**Nickel**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Seven lines of evidence are available in the administrative record to assess this pollutant. Two out of two sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. Eight out of eight sediment samples exhibited toxicity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of two sediment samples exceeded the evaluation guideline and eight out of eight sediment samples exhibited toxicity. This exceeds the allowable frequency listed in Table 3.1 and section 3.6 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36924, Nickel	**Region 3**
Tembladero Slough	

LOE ID:	58668
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. One of the sample exhibited significant toxicity to the survival of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 309TDW - Tembladero Slough at Molera Road.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36924, Nickel **Region 3**

Tembladero Slough

LOE ID:	58670
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. All three samples exhibited significant toxicity. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 309TEH-Tembladero Slough at Haro Road.
Temporal Representation:	The samples were collected annualy in April, 2007 - 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36924, Nickel **Region 3**

Tembladero Slough

LOE ID:	58655
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough at Monterey Dunes Way - 309TDWxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36924, Nickel **Region 3**

Tembladero Slough

LOE ID:	58667
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample exhibited significant toxicity to the survival of Hyalella azteca. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 309TDWxxx.
Temporal Representation:	The sample was collected in July 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36924, Nickel **Region 3**

Tembladero Slough

LOE ID:	24642
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 4/12/2005-5/24/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36924, Nickel **Region 3**

Tembladero Slough

LOE ID:	24643
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint

	when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36924, Nickel **Region 3**

Tembladero Slough

LOE ID:	16886
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37620**	**Region 3**
Tembladero Slough		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-three lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Seventeen of the 90 samples exceeded the water quality objective for dissolved oxygen in Fish Spawning Habitats and therefore this use is not supported. However, only 12 of the 350 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Fish Spawning and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination to the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of the 90 samples exceeded the water quality objective for dissolved oxygen in Fish Spawning Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Lower Salinas River Watershed Nutrients TMDL has been approved by USEPA. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	15302
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	135
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 135 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough@preston, 309TEMMOL - Tembladero Slough 2]
Temporal Representation:	Data was collected over the time period 6/13/1994-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	18228
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 4 monitoring sites [309-TEMBL-31 - Tembladero Creek, 309-TEMBL-32 - Tembladero Slough Hwy 183, 309-TEMBL-33 - Tembladero Slough at Preston Bridge, 309-TEMBL-34 - Upper Tembladero Cr at Anderson Property]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	15098
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	115
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Tembladero Slough to determine beneficial use support and results are as follows: 38 of 115 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006

	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough@preston, 309TEMMOL - Tembladero Slough 2]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	14508
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]

Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	14522
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tembladero Slough to determine beneficial use support and results are as follows: 21 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEH - Tembladero Slough at Haro]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	12544
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	12577
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 10 of 23

samples exceed the criterion for Oxygen, Saturation.

Data Reference: Final Data File used for assessment: CCAMP Salinas Toxicity data
Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]

Temporal Representation: Data was collected over the time period 3/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID: 12564

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 23
Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 23 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Final Data File used for assessment: CCAMP Salinas Toxicity data
Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	12545
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Tembladero Slough to determine beneficial use support and results are as follows: 20 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/12/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	12561
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TDW-Tembladero Slough at Molera Road, 309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 7/27/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	12562
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TDW-Tembladero Slough at Molera Road, 309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 7/27/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	58641
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 10 of 32 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]

Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	58658
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	33
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 3 of 33 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	58657
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 33 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [Tembladero Slough - 309TEH]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	52435
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	52434
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	52416
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	52415
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	41
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 12 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	52437
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM- Tembladero Slough at Preston Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	52910
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	52897
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	52436
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 25 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Molera Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37620, Oxygen, Dissolved **Region 3**

Tembladero Slough

LOE ID:	52886

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Tembladero Slough to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 2 monitoring sites [309TEMPRS - Tembladero Slough at Preston Street , 309TEMMOL - Tembladero Slough at MOL]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

DECISION ID	**42576**	**Region 3**
Tembladero Slough		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42576, Anthracene **Region 3**

Tembladero Slough

LOE ID:	14797
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42569 Region 3

Tembladero Slough

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42569, Benzo(a)anthracene Region 3

Tembladero Slough

LOE ID:	15742
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42568**	**Region 3**
Tembladero Slough		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42568, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Tembladero Slough

LOE ID:	15372
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42580 Region 3
Tembladero Slough

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42580, Chrysene (C1-C4) Region 3
Tembladero Slough

LOE ID:	16012
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001)

	data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42572**	**Region 3**
Tembladero Slough		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42572, Fluoranthene **Region 3**

Tembladero Slough

LOE ID:	16454
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42583 **Region 3**

Tembladero Slough

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42583, Fluorene **Region 3**

Tembladero Slough

LOE ID:	16571
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42948**	**Region 3**
Tembladero Slough		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42948, Naphthalene **Region 3**

Tembladero Slough

LOE ID:	17305
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42595** **Region 3**

Tembladero Slough

Pollutant: **Phenanthrene**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42595, Phenanthrene **Region 3**

Tembladero Slough

LOE ID:	16973
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42605**	**Region 3**
Tembladero Slough		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42605, Pyrene **Region 3**

Tembladero Slough

LOE ID:	17103
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TDW-Tembladero Slough at Monterey Dunes Way]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37629** **Region 3**

Tembladero Slough

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Enterococcus is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Five of 13 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 13 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 13 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37629, Enterococcus **Region 3**

Tembladero Slough

LOE ID:	14149
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Tembladero Slough to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental

	Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM_CCL - TEM_CCL]
Temporal Representation:	Data was collected over the time period 1/27/2004-6/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37629, Enterococcus **Region 3**

Tembladero Slough

LOE ID:	14133
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Tembladero Slough to determine beneficial use support and results are as follows: 5 of 13 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tembladero Slough was collected at 1 monitoring site [309TEM_CCL - TEM_CCL].
Temporal Representation:	Data was collected monthly over the time period 1/27/2004-6/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Salinas Reclamation Canal**
Water Body ID: **CAR3091101019980828112229**
Water Body Type: **River & Stream**

DECISION ID **34005** **Region 3**
Salinas Reclamation Canal

Pollutant: **Pesticides**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This decision for the general category of 'Pesticides' is being replaced by individual decisions for each of the pesticides for which there are data. This water segment is being assessed for a full suite of currently applied pesticides such as OP and pyrethroid pesticides. Those individual decisions replace this generic decision for pesticides.

This decision for pesticides was made prior to 2006 and the supporting data and other information are not held in an assessment database. The historic administrative record does not include specific data for this decision.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 34005, Pesticides **Region 3**
Salinas Reclamation Canal

LOE ID: 3996

Pollutant: Pesticides
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: Placeholder reference pre-2006 303(d)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified

Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 40698 Region 3

Salinas Reclamation Canal

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. A total of 135 of the 179 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 135 of the 179 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40698, Turbidity Region 3

Salinas Reclamation Canal

LOE ID:	51350
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40698, Turbidity **Region 3**

Salinas Reclamation Canal

LOE ID:	57087
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	76
Number of Exceedances:	59
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 59 of 76 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Shoup, D.E. and D.H. Wahl (2009) states that largemouth bass had more difficulty in capturing rapidly moving fish prey at 40 NTU and the overall foraging rate was much lower.
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON, Salinas Reclamation Canal - 309AVR]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40698, Turbidity **Region 3**

Salinas Reclamation Canal

LOE ID:	13682
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 12 of 22 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 1 monitoring site [San Jon Rd]
Temporal Representation:	Data was collected over the time period 4/13/2000-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40698, Turbidity **Region 3**

Salinas Reclamation Canal

LOE ID:	14700
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	52
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 40 of 52 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40698, Turbidity **Region 3**

Salinas Reclamation Canal

LOE ID:	13051
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	20

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 20 of 25 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40469**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Three beneficial uses are assessed. Eighty-two of the 247 samples exceed the water quality objectives for Recreation uses and 66 of the 247 samples exceed the water quality objectives for Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eighty-two of the 247 samples exceed the water quality objectives for Recreation uses and 66 of the 247 samples exceed the water quality objectives for Warm Freshwater Habitats. These exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	14649
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	50
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 20 of 50 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH — Region 3

Salinas Reclamation Canal

LOE ID:	14650
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	50
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 20 of 50 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH — Region 3

Salinas Reclamation Canal

LOE ID:	14651
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	50
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 14 of 50 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	19002
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and

	Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309-RECDI-31 - Rec Ditch, 309-ALISA-32 - Upper Alisal Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	18927
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309-RECDI-31 - Rec Ditch, 309-ALISA-32 - Upper Alisal Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	18928
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309-RECDI-31 - Rec Ditch, 309-ALISA-32 - Upper Alisal Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	17987
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	81
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 4 of 81 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309-RECDI-35 - Reclamation Ditch behind TV station Channel 35, 309-MOFFE-31 - Reclamation Ditch behind TV station Channel 35, 309-RECDI-33 - Reclamation Ditch at Beverly, 309-RECDI-34 - reclamation ditch at Sherwood Drive overpass, 309-RECDI-31 - Rec Ditch]
Temporal Representation:	Data was collected over the time period 8/30/2005-12/6/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	17988
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	81
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 4 of 81 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309-RECDI-35 - Reclamation Ditch behind TV station Channel 35, 309-MOFFE-31 - Reclamation Ditch behind TV station Channel 35, 309-RECDI-33 - Reclamation Ditch at Beverly, 309-RECDI-34 - reclamation ditch at Sherwood Drive overpass, 309-RECDI-31 - Rec Ditch]
Temporal Representation:	Data was collected over the time period 8/30/2005-12/6/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	11177
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 6 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	17989
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	81
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 6 of 81 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309-RECDI-35 - Reclamation Ditch behind TV station Channel 35, 309-MOFFE-31 - Reclamation Ditch behind TV station Channel 35, 309-RECDI-33 - Reclamation Ditch at Beverly, 309-RECDI-34 - reclamation ditch at Sherwood Drive overpass, 309-RECDI-31 - Rec Ditch]
Temporal Representation:	Data was collected over the time period 8/30/2005-12/6/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	11193
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 2 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	11176
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 6 of 27 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring

	sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	57081
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	78
Number of Exceedances:	52
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 52 of 78 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON, Salinas Reclamation Canal - 309AVR]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	57080
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	78
Number of Exceedances:	52
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 52 of 78 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON, Salinas Reclamation Canal - 309AVR]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	57079
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	78
Number of Exceedances:	44
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 44 of 78 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring

	sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON, Salinas Reclamation Canal - 309AVR]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	51349
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	51185
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40469, pH **Region 3**

Salinas Reclamation Canal

LOE ID:	51187
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring

	sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **33126** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the previously approved decisions for unionized ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Fifty of the 156 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty of the 156 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The Salinas River Watershed Nutrient TMDL has been approved by USEPA on October 13, 2015. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33126, Ammonia **Region 3**

Salinas Reclamation Canal

LOE ID:	57043
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	79
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 25 of 79 samples exceed the criterion for Ammonia as N, Unionized. Five additional samples collected by the CMP in the Salinas Reclamation Canal are not assessed here because the results were qualified as either non-detect or detected but not qualified and the reporting limit is higher than the criteria. Therefore, these five results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON, Salinas Reclamation Canal - 309AVR]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33126, Ammonia **Region 3**

Salinas Reclamation Canal

LOE ID:	51327
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation

	Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33126, Ammonia **Region 3**

Salinas Reclamation Canal

LOE ID:	9469
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 7 of 25 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road].
Temporal Representation:	Data was collected over the time period 11/30/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33126, Ammonia **Region 3**

Salinas Reclamation Canal

LOE ID:	14633
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 18 of 48 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	41512	Region 3
Salinas Reclamation Canal		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-three of the forty water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Note that in LOE#15097, the sample count was changed from four out of nineteen exceeding the evaluation guideline to four out of four exceeding the evaluation guideline. This is because the laboratory reporting limit was above the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Thirty-three of the forty water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41512, Chlorpyrifos — Region 3

Salinas Reclamation Canal

LOE ID:	15097
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 4 of 19 samples exceed the criterion for chlorpyrifos.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309JON_DPR - Rec Ditch at San Jon Rd, 309REC-DLT_DPR - Reclamation Ditch near Airport Blvd. (at De La Torre)]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41512, Chlorpyrifos — Region 3

Salinas Reclamation Canal

LOE ID:	14037
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 26 of 26 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [San Jon Rd, Victor Way, Hwy 183]
Temporal Representation:	Data was collected over the time period 4/13/2000-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41512, Chlorpyrifos **Region 3**

Salinas Reclamation Canal

LOE ID:	15073
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41512, Chlorpyrifos **Region 3**

Salinas Reclamation Canal

LOE ID:	57049
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L

	(Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**44681**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under sections 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fifty-one of the fifty-five samples exceed the evaluation guideline (Siepmann and Finlayson, 2000; Finlayson, 2004) set to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-one of the fifty-five samples exceed the evaluation guideline (Siepmann and Finlayson, 2000; Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 44681, Diazinon **Region 3**

Salinas Reclamation Canal

LOE ID:	57055
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB, Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44681, Diazinon **Region 3**

Salinas Reclamation Canal

LOE ID:	13888
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 24 of 26 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [San Jon Rd, Victor Way, Hwy 183]
Temporal Representation:	Data was collected over the time period 4/13/2000-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44681, Diazinon **Region 3**

Salinas Reclamation Canal

LOE ID:	15135
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Pesticide Regulation_Lower Salinas (DPR) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 18 of 19 samples exceed the criterion for diazinon.
Data Reference:	e-mail providing Standard operating procedures and Quality Assurance information Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309JON_DPR - Rec Ditch at San Jon Rd, 309REC-DLT_DPR - Reclamation Ditch near Airport Blvd. (at De La Torre)]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44681, Diazinon **Region 3**

Salinas Reclamation Canal

LOE ID:	15074
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40804**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Illegal dumping | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Seventy-four of 104 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 18 of 100 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-four of 104 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 18 of 100 samples exceed the water quality objective for non-contact recreation. Both of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40804, Escherichia coli (E. coli) **Region 3**

Salinas Reclamation Canal

LOE ID:	18453
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	68
Number of Exceedances:	12
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 12 of 68 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309-RECDI-35 - Reclamation Ditch behind TV station Channel 35, 309-MOFFE-31 - Reclamation Ditch behind TV station Channel 35, 309-RECDI-33 - Reclamation Ditch at Beverly, 309-RECDI-34 - reclamation ditch at Sherwood Drive overpass, 309-RECDI-31 - Rec Ditch]
Temporal Representation:	Data was collected over the time period 8/30/2005-12/6/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40804, Escherichia coli (E. coli) **Region 3**

Salinas Reclamation Canal

LOE ID:	18452
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	68
Number of Exceedances:	45
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 45 of 68 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309-RECDI-35 - Reclamation Ditch behind TV station Channel 35, 309-MOFFE-31 - Reclamation Ditch behind TV station Channel 35, 309-RECDI-33 - Reclamation Ditch at Beverly, 309-RECDI-34 - reclamation ditch at Sherwood Drive overpass, 309-RECDI-31 - Rec Ditch]
Temporal Representation:	Data was collected over the time period 8/30/2005-12/6/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40804, Escherichia coli (E. coli) **Region 3**

Salinas Reclamation Canal

LOE ID:	18350
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309-RECDI-31 - Rec Ditch, 309-ALISA-32 - Upper Alisal Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40804, Escherichia coli (E. coli) **Region 3**

Salinas Reclamation Canal

LOE ID:	18349
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309-RECDI-31 - Rec Ditch, 309-ALISA-32 - Upper Alisal Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40804, Escherichia coli (E. coli) **Region 3**

Salinas Reclamation Canal

LOE ID:	11195
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 5 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40804, Escherichia coli (E. coli) **Region 3**

Salinas Reclamation Canal

LOE ID:	11194
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	21

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 21 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/24/2006-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40804, Escherichia coli (E. coli) **Region 3**

Salinas Reclamation Canal

LOE ID:	51184
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **32698** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Illegal dumping | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Fecal Coliform
TMDL Project Code:	43
Date TMDL Approved by USEPA:	01/31/2012
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fifty of 59 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 24 of 59 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty of 59 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 24 of 59 samples exceed the water quality objective for non-contact recreation. Both of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Lower Salinas River Watershed Fecal Coliform TMDL has been approved by USEPA on 01/31/2012. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met..
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32698, Fecal Coliform **Region 3**

Salinas Reclamation Canal

LOE ID:	51183
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32698, Fecal Coliform **Region 3**

Salinas Reclamation Canal

LOE ID:	51186
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32698, Fecal Coliform **Region 3**

Salinas Reclamation Canal

LOE ID:	11174
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	48
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 48 of 55 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period

exceed 400 MPN/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]

Temporal Representation: Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32698, Fecal Coliform **Region 3**

Salinas Reclamation Canal

LOE ID: 11175

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 55
Number of Exceedances: 23

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 23 of 55 samples exceed the criterion for Coliform, Fecal.

Data Reference: Final Data File used for assessment: CCAMP Salinas Toxicity data
Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]

Temporal Representation: Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42708**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Two hundred fifty of the 263 nitrate samples and 30 of the 31 nitrate/nitrite samples exceed the water quality objectives for the Warm Freshwater Habitat beneficial use. In addition, the following supporting evidence of eutrophication and risk of eutrophication is provided:

The following is a summary of the supporting evidence:

1) Dissolved oxygen for this water body ranged from 1.2 mg/L to 19.58 mg/L, often exceeding (falling below) the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody often exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Visual observation of floating algal mats ranged up to 100 % cover, often exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration ranged up to 150 ug/L, often exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from 2.33 mg/L to 4.41 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 46 g/m2 ash-free dry weight (AFDW) to 104 g/m2 AFDW. This latter value exceeds the Warm water screening threshold of 80 grams/m2 (Creager, et al., 2006).
6) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 115 mg/m2 to 260 mg/m2. This latter value exceeds the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two hundred fifty of the 263 nitrate samples and 30 of the 31 nitrate/nitrite samples exceed the water quality objectives for the Warm Freshwater Habitat beneficial use and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. In addition, there is sufficient supporting evidence of eutrophication in this water segment.
4. The Lower Salinas Nutrient TMDL has been approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42708, Nitrate **Region 3**

Salinas Reclamation Canal

LOE ID:	28158
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	118
Number of Exceedances:	114
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Central Coast Watershed Studies (R3_CCOWS)
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [San Jon Rd, Victor Way, Hwy 183]
Temporal Representation:	Data was collected over the time period 10/11/2000-6/10/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP.

However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42708, Nitrate **Region 3**

Salinas Reclamation Canal

LOE ID:	28107
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth). All 13 samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 2/22/2005-12/13/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42708, Nitrate **Region 3**

Salinas Reclamation Canal

LOE ID:	28150
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	68
Number of Exceedances:	59
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed Council (Clean streams project) (R3_CLNStrm)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309-RECDI-35 - Reclamation Ditch behind TV station Channel 35, 309-MOFFE-31 - Reclamation Ditch at Moffett, 309-RECDI-33 - Reclamation Ditch at Beverly, 309-RECDI-34 - Reclamation Ditch at Sherwood Drive, and 309-RECDI-31 - Rec Ditch].
Temporal Representation:	Data was collected over the time period 8/30/2005-12/6/2006. Samples were collected as volunteer schedules allowed.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42708, Nitrate **Region 3**

Salinas Reclamation Canal

LOE ID:	28118
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	53
Number of Exceedances:	53
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: CCAMP (Salinas). All 53 of the samples exceed the evaluation guideline for nitrate.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites. CCAMP has conducted monitoring in this watershed rotation area in both 1999 and 2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42708, Nitrate **Region 3**

Salinas Reclamation Canal

LOE ID:	28144
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Coastal Watershed

	Council (Snapshot day monitoring) (R3_Snap)
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309-RECDI-31 - Rec Ditch, 309-ALISA-32 - Upper Rec/Alisal Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42708, Nitrate **Region 3**

Salinas Reclamation Canal

LOE ID:	51329
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42708, Nitrate **Region 3**

Salinas Reclamation Canal

LOE ID:	51330
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

	for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42708, Nitrate **Region 3**

Salinas Reclamation Canal

LOE ID:	57076
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 26 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [Salinas Reclamation Canal - 309JON, Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309AVR]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.

QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **40832** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. Forty-three of the 260 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-three of the 260 samples exceeded the water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Salinas River Watershed Nutrient TMDL has been approved by USEPA on October 13, 2015.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	57062
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	78
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 21 of 78 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON, Salinas Reclamation Canal - 309AVR]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	57077
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	78
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 4 of 78 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON, Salinas Reclamation Canal - 309AVR]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	51348
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	51347
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	13048
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 37 of 53 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	13047
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 13 of 53 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	14648
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	29
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 29 of 50 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	14635
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 6 of 50 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	18158
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309-RECDI-31 - Rec Ditch, 309-ALISA-32 - Upper Alisal Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	18076
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 16 of 61 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 4 monitoring sites [309-RECDI-35 - Reclamation Ditch behind TV station Channel 35, 309-RECDI-33 - Reclamation Ditch at Beverly, 309-RECDI-34 - reclamation ditch at Sherwood Drive overpass, 309-RECDI-31 - Rec Ditch]
Temporal Representation:	Data was collected over the time period 8/30/2005-12/6/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	13050
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 7/7/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	13049
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 7/7/1999-8/31/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40832, Oxygen, Dissolved **Region 3**

Salinas Reclamation Canal

LOE ID:	3995
Pollutant:	Low Dissolved Oxygen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	40697	Region 3
Salinas Reclamation Canal		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Three LOEs summarize sediment samples. Nine sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and seven additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, sixteen total samples are available to assess toxic effects in sediment samples. Fifteen of the sixteen sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Seven LOEs summarize water samples. Eighteen water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twenty-five water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, forty-three total samples are available to assess toxic effects in water samples. Thirty-seven of the forty-three water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Fifteen of the 16 sediment samples and 37 of the 43 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDLhas been approved by USEPA on October
5.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	24484
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 4/11/2005-5/25/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	24509
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	24502
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/15/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	24500
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 6/14/2006-2/14/2007. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	26257
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Fish Migration | Wildlife Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALU - Salinas Reclamation Canal at Airport Road and 309ALD - Salinas Reclamation Canal at Boranda Road].
Temporal Representation:	Data was collected on two sample dates, 6/14/06 and 2/14/07. CCAMP staff conduct water toxicity monitoring in both warm and dry weather flows and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	none
QAPP Information:	SWAMP QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	24482
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	14
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 14 of 14 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309JON - Salinas Reclamation Canal at San Jon Road, 309ALG - Salinas Reclamation Canal at La Guardia].
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	24501
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 2/16/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	24491
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309SR1 - Salinas Reclamation Ditch at Moffett, 309SR2 - Salinas Reclamation Ditch at Caesar Chaves Park, 309SR3 - Salinas Reclamation Ditch at Sheerwood, 309SR4 - Salinas Reclamation Ditch at Victor Street, 309SR5 - Salinas Reclamation Ditch at San Jon Road]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	57085
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	7
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Seven samples were collected to evaluate sediment toxicity. All seven of the samples exhibited significant toxicity to Hyalella azteca survival. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309AVR - Salinas Reclamation Canal @ Davis Rd., 309ALG - Salinas Reclamation Canal at La Guardia and 309JON - Salinas Reclamation Canal at San Jon Rd.
Temporal Representation:	The samples were collected annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40697, Toxicity **Region 3**

Salinas Reclamation Canal

LOE ID:	57086
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	19
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-five samples were collected to evaluate water toxicity. Nineteen of the 25 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. Ten of the eleven sample collected from station 309ALG exhibited significant toxicity to Ceriodaphnia dubia and one of those samples resulted in significant reduction in total call count to the algae Selenastrum. Two of the three samples collected from the station 309AVR exhibited significant toxicity to Ceriodaphnia dubia and seven of the eleven samples collected from the station 309JON exhibited significant toxicity to Ceriodaphnia dubia. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 309AVR-Salinas Reclamation Canal @ Davis Rd., 309ALG-Salinas Reclamation Canal at La Guardia, and at 309JON-Salinas Reclamation Canal at San Jon Rd.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**49316**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is one and although 19 samples were collected, 18 samples are reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results of 18 of the samples could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49316, Bifenthrin **Region 3**

Salinas Reclamation Canal

LOE ID:	57044
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support. Nineteen samples were collected and one of those sample results exceeded the guideline, however the remianing eighteen samples were non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner (Fojut et al. 2012).
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID **40835** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 187 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of the 187 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40835, Chlorophyll-a **Region 3**

Salinas Reclamation Canal

LOE ID:	57048
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	78
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 78 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A ? Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 3 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON, Salinas Reclamation Canal - 309AVR]
Temporal Representation:	Data was collected over the time period 1/30/2007-12/9/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40835, Chlorophyll-a **Region 3**

Salinas Reclamation Canal

LOE ID:	51328
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 1/8/2007-2/14/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40835, Chlorophyll-a **Region 3**

Salinas Reclamation Canal

LOE ID:	14634
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 3 of 48 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALG - Salinas Reclamation Canal at La Guardia, 309JON - Salinas Reclamation Canal at San Jon Road]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

QAPP Information Reference(s):	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

Line of Evidence (LOE) for Decision ID 40835, Chlorophyll-a **Region 3**

Salinas Reclamation Canal

LOE ID:	9468
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 10 of 57 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [309ALD-Salinas Reclamation Canal at Boranda Road, 309ALU-Salinas Reclamation Canal at Airport Road]
Temporal Representation:	Data was collected over the time period 2/1/1999-12/12/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	49317	Region 3
Salinas Reclamation Canal		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is one and although 19 samples were collected, all samples are reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results of 19 of the samples could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. [Zero of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49317, Cyfluthrin	**Region 3**
Salinas Reclamation Canal	

LOE ID:	57050
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support. Nineteen samples were collected however all nineteen samples were Non-Detect and method detection limit was above the guideline therefore the results could not be used with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**49318**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is one and although 19 samples were collected, all samples are reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results of 19 of the samples could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49318, Cyhalothrin, Lambda **Region 3**

Salinas Reclamation Canal

LOE ID:	57051
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support. Nineteen samples were collected however all nineteen samples were Non-Detect and method detection limit was above the guideline therefore the results could not be used with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of lambda-cyhalothrin does not exceed 0.0005 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of lambda-cyhalothrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at

http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).

QAPP Information Reference(s):

DECISION ID	49319	Region 3
Salinas Reclamation Canal		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Note the sample count is one and although 19 samples were collected, all samples are reported as Â‘non-detectÂ’ and the laboratory method detection limit was above the guideline, therefore the results of 19 of the samples could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49319, Cypermethrin	**Region 3**
Salinas Reclamation Canal	

LOE ID:	57052
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support. Nineteen samples were collected however all nineteen samples were Non-Detect and method detection limit was above the guideline therefore the results could not be used with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**49325**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the ten samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the ten samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49325, Demeton **Region 3**

Salinas Reclamation Canal

LOE ID:	57054
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49325, Demeton **Region 3**

Salinas Reclamation Canal

LOE ID:	57053
Pollutant:	Demeton

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**49327**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49327, Dichlorvos **Region 3**

Salinas Reclamation Canal

LOE ID:	57057
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring

	sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49327, Dichlorvos **Region 3**

Salinas Reclamation Canal

LOE ID:	57056
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49327, Dichlorvos **Region 3**

Salinas Reclamation Canal

LOE ID:	57058
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID **49328** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49328, Dimethoate **Region 3**

Salinas Reclamation Canal

LOE ID:	57061
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

	data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49328, Dimethoate **Region 3**

Salinas Reclamation Canal

LOE ID:	57059
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49328, Dimethoate **Region 3**

Salinas Reclamation Canal

LOE ID:	57060
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**49320**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Dyfonate (Fonofos or Fonophos)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 19 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49320, Dyfonate (Fonofos or Fonophos) **Region 3**

Salinas Reclamation Canal

LOE ID:	57063
Pollutant:	Dyfonate (Fonofos or Fonophos)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Fonofos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fonofos is the maximum acceptable toxicant concentration (MATC) of 0.45 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.64 ug/L and the no observed effect concentration (NOEC) of 0.31 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	49321	Region 3
Salinas Reclamation Canal		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49321, Esfenvalerate/Fenvalerate	**Region 3**
Salinas Reclamation Canal	

LOE ID:	57064
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Esfenvalerate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA Office of Pesticide Programs Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49329 Region 3

Salinas Reclamation Canal

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49329, Ethoprop Region 3

Salinas Reclamation Canal

LOE ID:	57066

Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49329, Ethoprop **Region 3**

Salinas Reclamation Canal

LOE ID:	57065
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49329, Ethoprop **Region 3**

Salinas Reclamation Canal

LOE ID:	57067
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49323 Region 3

Salinas Reclamation Canal

Pollutant:	**Fenamiphos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49323, Fenamiphos Region 3

Salinas Reclamation Canal

LOE ID:	57068
Pollutant:	Fenamiphos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Fenamiphos.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenamiphos is the median lethal concentration (LC50) of 9.5 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**49324**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 19 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49324, Methidathion **Region 3**

Salinas Reclamation Canal

LOE ID:	57072
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Methidathion.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID 49330 Region 3

Salinas Reclamation Canal

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49330, Methyl Parathion Region 3

Salinas Reclamation Canal

LOE ID:	57074
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49330, Methyl Parathion **Region 3**

Salinas Reclamation Canal

LOE ID:	57075
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49330, Methyl Parathion **Region 3**

Salinas Reclamation Canal

LOE ID:	57073
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49331** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49331, Phorate **Region 3**

Salinas Reclamation Canal

LOE ID:	57082
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49331, Phorate **Region 3**

Salinas Reclamation Canal

LOE ID:	57083
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity test using Bluegill sunfish (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at

http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 49331, Phorate **Region 3**

Salinas Reclamation Canal

LOE ID:	57084
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **49332** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Four of the 11 samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 11 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49332, Malathion **Region 3**

Salinas Reclamation Canal

LOE ID:	57069
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/26/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49332, Malathion — Region 3

Salinas Reclamation Canal

LOE ID:	57070
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309ALG, Salinas Reclamation Canal - 309JON]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 49332, Malathion — Region 3

Salinas Reclamation Canal

LOE ID:	57071
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support. Nineteen samples were collected and one of those sample results exceeded the guideline, however the remianing eighteen samples were non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).
QAPP Information Reference(s):	

DECISION ID	**49326**	**Region 3**
Salinas Reclamation Canal		

Pollutant:	**Permethrin, total**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the two samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49326, Permethrin, total **Region 3**

Salinas Reclamation Canal

LOE ID:	57078
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed DPR data for Salinas Reclamation Canal to determine beneficial use support. Nineteen samples were collected and two of those sample results exceeded the guideline, however the remianing seventeen samples were non-detect and the laboratory method detection limit was above the guideline, therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Final Data File used for assessment: Department of Pesticide Regulation Data_ 2003-2005
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 2 monitoring sites [Salinas Reclamation Canal - 309JON, Â Salinas Reclamation Canal - 309REC]
Temporal Representation:	Data was collected over the time period 6/16/2003-5/3/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected and analyzed following Department of Pesticide Regulation Standard Operating Procedures (Available online at http://www.cdpr.ca.gov/docs/emon/pubs/sop.htm).

QAPP Information Reference(s):

DECISION ID	41562	Region 3
Salinas Reclamation Canal		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41562, Dieldrin	**Region 3**
Salinas Reclamation Canal	

LOE ID:	19496
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Salinas Reclamation Canal to determine beneficial use support and results are as

	follows: 0 of 5 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309SR5 - Salinas Reclamation Ditch at San Jon Road, 309SR4 - Salinas Reclamation Ditch at Victor Street, 309SR3 - Salinas Reclamation Ditch at Sheerwood, 309SR2 - Salinas Reclamation Ditch at Caesar Chaves Park, 309SR1 - Salinas Reclamation Ditch at Moffett]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID	40847	Region 3
Salinas Reclamation Canal		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40847, Endrin **Region 3**

Salinas Reclamation Canal

LOE ID:	19522
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Don Westin Toxicity study (R3_Weston) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: Don Weston Salinas Toxicity Data Final Data File used for assessment: Don Weston_Salinas CCMP Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309SR5 - Salinas Reclamation Ditch at San Jon Road, 309SR4 - Salinas Reclamation Ditch at Victor Street, 309SR3 - Salinas Reclamation Ditch at Sheerwood, 309SR2 - Salinas Reclamation Ditch at Caesar Chaves Park, 309SR1 - Salinas Reclamation Ditch at Moffett]
Temporal Representation:	Data was collected on a single day 9/23/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was prepared specifically for this project. However the work was conducted consistent with an approved QAPP from a previous project. That QAPP is available upon request.
QAPP Information Reference(s):	e-mail clarifying QAPP information

DECISION ID **40524** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 29 samples exceeded the water quality objective for aquatic habitats and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40524, Zinc **Region 3**

Salinas Reclamation Canal

LOE ID:	18583
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 2 of 29 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries). Table 3-5 (page III-11) states, the maximum concentration for zinc in aquatic life habitats is 0.2 mg/L
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309-RECDI-35 - Reclamation Ditch behind TV station Channel 35, 309-MOFFE-31 - Reclamation Ditch behind TV station Channel 35, 309-RECDI-33 - Reclamation Ditch at Beverly, 309-RECDI-34 - reclamation ditch at Sherwood Drive overpass, 309-RECDI-31 - Rec Ditch]
Temporal Representation:	Data was collected over the time period 8/30/2005-3/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40801** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Copper**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 29 samples exceeded the water quality objective for aquatic habitats and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40801, Copper **Region 3**

Salinas Reclamation Canal

LOE ID: 17501

Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Salinas Reclamation Canal to determine beneficial use support and results are as follows: 6 of 29 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries). Table 3-5 (page III-11) states, the maximum concentration for copper in aquatic life habitats is 0.03 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In Table 3-5 of the Basin Plan (page III-11), the maximum concentration for copper in aquatic life habitats is 0.03 mg/L.
Guideline Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Spatial Representation:	Data for this line of evidence for Salinas Reclamation Canal was collected at 5 monitoring sites [309-RECDI-35 - Reclamation Ditch behind TV station Channel 35, 309-MOFFE-31 - Reclamation Ditch behind TV station Channel 35, 309-RECDI-33 - Reclamation Ditch at Beverly, 309-RECDI-34 - reclamation ditch at Sherwood Drive overpass, 309-RECDI-31 - Rec Ditch]
Temporal Representation:	Data was collected over the time period 8/30/2005-3/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **34757** **Region 3**

Salinas Reclamation Canal

Pollutant:	**Priority Organics**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a CWA section 303(d) Listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34757, Priority Organics **Region 3**

Salinas Reclamation Canal

LOE ID:	3997
Pollutant:	Priority Organics
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Not Recorded
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Salmon Creek**
Water Body ID: **CAR3080006420020124131949**
Water Body Type: **River & Stream**

DECISION ID **50179** **Region 3**
Salmon Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the eleven samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the twelve samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the eleven samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the twelve samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50179, Ammonia **Region 3**
Salmon Creek

LOE ID: 51260

Pollutant: Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50179, Ammonia **Region 3**

Salmon Creek

LOE ID:	51313
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**50180**	**Region 3**
Salmon Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50180, Chlorophyll-a **Region 3**

Salmon Creek

LOE ID:	51314
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **48820** **Region 3**

Salmon Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E.coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. One of 12 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48820, Escherichia coli (E. coli) **Region 3**

Salmon Creek

LOE ID:	51276
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**48821**	**Region 3**
Salmon Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. One of 12 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 0 of 12 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of the 12 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48821, Fecal Coliform	**Region 3**

Salmon Creek

LOE ID:	51275
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 48821, Fecal Coliform **Region 3**

Salmon Creek

LOE ID:	51278
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to

	determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**53075**	**Region 3**
Salmon Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 12 nitrate samples exceed the water quality objectives for Cold Freshwater Habitat beneficial use. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does not the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 12 nitrate samples exceed the water quality objectives for Cold Freshwater Habitat beneficial use. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53075, Nitrate **Region 3**

Salmon Creek

LOE ID:	51315
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53075, Nitrate **Region 3**

Salmon Creek

LOE ID:	51262
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53075, Nitrate **Region 3**

Salmon Creek

LOE ID:	51263
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53075, Nitrate **Region 3**

Salmon Creek

LOE ID:	51245
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM

	- Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50183	Region 3
Salmon Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 12 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50183, Oxygen, Dissolved	Region 3
Salmon Creek	

LOE ID:	51247
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50183, Oxygen, Dissolved **Region 3**

Salmon Creek

LOE ID:	51246
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 50181 Region 3

Salmon Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the evaluation guideline used to interpret the water quality objective for temperature and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50181, Temperature, water Region 3

Salmon Creek

LOE ID:	51259
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **50182** **Region 3**

Salmon Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the evaluation guideline used to interpret the water quality objective for turbidity and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed

to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50182, Turbidity **Region 3**

Salmon Creek

LOE ID:	51249
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50184	Region 3
Salmon Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. One of the 12 samples exceed the water quality objective for Cold Freshwater Habitats and four of the 12 samples exceed the water quality objectives for Drinking Water and Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 12 samples exceed the water quality objective for Cold Freshwater Habitats and four of the 12 samples exceed the water quality objectives for Drinking Water and Recreation and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50184, pH	**Region 3**
Salmon Creek	

LOE ID:	51277
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50184, pH **Region 3**

Salmon Creek

LOE ID:	51279
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50184, pH **Region 3**

Salmon Creek

LOE ID:	51248
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50184, pH **Region 3**

Salmon Creek

LOE ID:	51264
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Salmon Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salmon Creek was collected at 1 monitoring site [308SAM - Salmon Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Mill Creek (Cape San Martin)**
Water Body ID: **CAR3080006020020117162102**
Water Body Type: **River & Stream**

DECISION ID **42186** **Region 3**
Mill Creek (Cape San Martin)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 25 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 26 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 25 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 26 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.
These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42186, Ammonia **Region 3**
Mill Creek (Cape San Martin)

LOE ID: 9184

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42186, Ammonia **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	9186
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42186, Ammonia **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	9185
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring

	site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42186, Ammonia **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50870
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42186, Ammonia **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50830

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42186, Ammonia **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50742
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42215 Region 3

Mill Creek (Cape San Martin)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 26 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 26 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42215, Chlorophyll-a Region 3

Mill Creek (Cape San Martin)

LOE ID:	50831

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42215, Chlorophyll-a **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50743
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42215, Chlorophyll-a **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	9484
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42215, Chlorophyll-a **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	9485
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42053**	**Region 3**
Mill Creek (Cape San Martin)		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for E. coli is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 16 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 4 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of 16 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 4 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42053, Escherichia coli (E. coli) **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18274
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42053, Escherichia coli (E. coli) **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18275
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42053, Escherichia coli (E. coli) **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50587
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42063 Region 3

Mill Creek (Cape San Martin)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 26 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 26 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 26 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 26 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42063, Fecal Coliform Region 3

Mill Creek (Cape San Martin)

LOE ID:	50586
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42063, Fecal Coliform **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50589
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a

	minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42063, Fecal Coliform **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	11082
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42063, Fecal Coliform **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	11081
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42067** **Region 3**

Mill Creek (Cape San Martin)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 12 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 29 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 12 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42067, Nitrate **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	9187
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California

	Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42067, Nitrate **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18411
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42067, Nitrate **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50744
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42067, Nitrate **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50832

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42067, Nitrate **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50848
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42067, Nitrate **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50873
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by

	reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42067, Nitrate **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50872
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42067, Nitrate **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50759
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42052** **Region 3**

Mill Creek (Cape San Martin)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Zero of the 32 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and zero of the 32 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats and those uses are fully supported. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 32 samples exceeded the water quality objectives for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50761
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring

	site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50850
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50849
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50760
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18191
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18190
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12920
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12918
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]

Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12919
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12941
Pollutant:	Dissolved oxygen saturation

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/23/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12940
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/23/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12939
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/23/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12938
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/23/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42052, Oxygen, Dissolved **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12903
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41445**	**Region 3**
Mill Creek (Cape San Martin)		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 32 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 32 samples exceed the evaluation guideline and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41445, Temperature, water **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12937
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41445, Temperature, water **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12956

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/23/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41445, Temperature, water **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18593
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use

	support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41445, Temperature, water **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50869
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41490** **Region 3**

Mill Creek (Cape San Martin)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 26 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and two of the 26 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 26 samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41490, Turbidity **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50763
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41490, Turbidity **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50852
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]

Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41490, Turbidity **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12921
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41490, Turbidity **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	12922

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41449** **Region 3**

Mill Creek (Cape San Martin)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Two of the 30 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and four of the 30 samples exceed the water quality objectives for Drinking Water and Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 30 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and four of the 30 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	19172
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18862
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18863
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18864
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	11101
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	18865
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308-MILLC-31 - Mill Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	11099
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]

Temporal Representation: Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID: 11098

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 14

Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]

Temporal Representation: Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID: 11083

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	11100
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50851
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50740
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50762
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50588
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41449, pH **Region 3**

Mill Creek (Cape San Martin)

LOE ID:	50585
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Mill Creek (Cape San Martin) to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Mill Creek (Cape San Martin) was collected at 1 monitoring site [308MIL-Mill Creek at Mill Creek Picnic Area]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Limekiln Creek**
Water Body ID: **CAR3080005219990304122844**
Water Body Type: **River & Stream**

DECISION ID **41360** **Region 3**
Limekiln Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which one of the 24 samples exceed the Basin Plan general water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 26 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 24 samples exceed the water quality objective for unionized but zero of the 26 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41360, Ammonia **Region 3**
Limekiln Creek

LOE ID:	9445
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41360, Ammonia **Region 3**

Limekiln Creek

LOE ID:	9446
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Limekiln Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41360, Ammonia **Region 3**

Limekiln Creek

LOE ID:	50350
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013

Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41360, Ammonia **Region 3**

Limekiln Creek

LOE ID:	50403
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-11/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47647** **Region 3**

Limekiln Creek

Pollutant: **Benthic Community Effects**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under section 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. The single sample did not exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective. This sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because there is not enough information showing that applicable water quality standards are being exceeded.

Line of Evidence (LOE) for Decision ID 47647, Benthic Community Effects **Region 3**

Limekiln Creek

LOE ID:	54578
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The IBI score in this water body was above 40 and therefore is not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.

Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 308LIMxxx-Limekiln Creek @ Limekiln State Park
Temporal Representation:	Surveys done on April 27, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

DECISION ID 42017 Region 3

Limekiln Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42017, Boron Region 3

Limekiln Creek

LOE ID:	50376
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42017, Boron **Region 3**

Limekiln Creek

LOE ID:	9447
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-7/18/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41312** **Region 3**

Limekiln Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41312, Chloride **Region 3**

Limekiln Creek

LOE ID:	9448
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-7/18/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41312, Chloride **Region 3**

Limekiln Creek

LOE ID:	50386
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41365**	**Region 3**
Limekiln Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41365, Chlorophyll-a **Region 3**

Limekiln Creek

LOE ID:	50415
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41365, Chlorophyll-a **Region 3**

Limekiln Creek

LOE ID:	9452
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41167**	**Region 3**
Limekiln Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for E. coli is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 16 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 4 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 16 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 4 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41167, Escherichia coli (E. coli) **Region 3**

Limekiln Creek

LOE ID:	18276
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.

Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41167, Escherichia coli (E. coli) **Region 3**

Limekiln Creek

LOE ID:	18277
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41167, Escherichia coli (E. coli) **Region 3**

Limekiln Creek

LOE ID:	50365
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41178**	**Region 3**
Limekiln Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 26 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 26 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 26 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 26 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41178, Fecal Coliform **Region 3**

Limekiln Creek

LOE ID:	50377
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41178, Fecal Coliform **Region 3**

Limekiln Creek

LOE ID:	50364
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41178, Fecal Coliform **Region 3**

Limekiln Creek

LOE ID:	11267
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41178, Fecal Coliform **Region 3**

Limekiln Creek

LOE ID:	11266
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41055 Region 3

Limekiln Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. [NUMBER] lines of evidence are available in the administrative record to assess this pollutant. [NUMBER] of the [NUMBER] samples exceed the [OBJECTIVE/GUIDELINE/CRITERIA]. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 29 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 12 nitrate samples exceed the water quality objectives for Cold Freshwater Habitat beneficial uses. Zero of the 12 nitrate/nitrite samples exceed the water quality objective for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 5 nitrate/nitrite samples exceed the water quality objective for Cold Freshwater Habitat beneficial uses. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41055, Nitrate Region 3

Limekiln Creek

LOE ID:	18430

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41055, Nitrate **Region 3**

Limekiln Creek

LOE ID:	9450
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41055, Nitrate **Region 3**

Limekiln Creek

LOE ID:	9449
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41055, Nitrate **Region 3**

Limekiln Creek

LOE ID:	18429
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41055, Nitrate **Region 3**

Limekiln Creek

LOE ID:	50417
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41055, Nitrate **Region 3**

Limekiln Creek

LOE ID:	50362
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41055, Nitrate **Region 3**

Limekiln Creek

LOE ID:	50388
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41055, Nitrate **Region 3**

Limekiln Creek

LOE ID:	50361
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41055, Nitrate **Region 3**

Limekiln Creek

LOE ID:	50416

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41055, Nitrate **Region 3**

Limekiln Creek

LOE ID:	50389
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47652** **Region 3**

Limekiln Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47652, Nitrogen, Nitrite **Region 3**
Limekiln Creek

LOE ID:	50400
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41324** **Region 3**
Limekiln Creek

Pollutant: **Oxygen, Dissolved**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 32 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 32 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater and Spawning Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41324, Oxygen, Dissolved **Region 3**

Limekiln Creek

LOE ID:	50419
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41324, Oxygen, Dissolved **Region 3**

Limekiln Creek

LOE ID:	50418
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41324, Oxygen, Dissolved **Region 3**

Limekiln Creek

LOE ID:	18211
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41324, Oxygen, Dissolved **Region 3**

Limekiln Creek

LOE ID:	12848
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/23/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41324, Oxygen, Dissolved **Region 3**

Limekiln Creek

LOE ID:	12844
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41324, Oxygen, Dissolved **Region 3**

Limekiln Creek

LOE ID:	12830
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41324, Oxygen, Dissolved **Region 3**

Limekiln Creek

LOE ID:	12862
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/23/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41264**	**Region 3**
Limekiln Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41264, Sodium **Region 3**

Limekiln Creek

LOE ID:	9451
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-7/18/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41264, Sodium **Region 3**

Limekiln Creek

LOE ID:	50402
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41384** **Region 3**

Limekiln Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity and when summed the beneficial use support rating should be Fully Supporting. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 30 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41384, Specific Conductivity **Region 3**

Limekiln Creek

LOE ID:	50387
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41384, Specific Conductivity **Region 3**

Limekiln Creek

LOE ID:	11268
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41384, Specific Conductivity **Region 3**

Limekiln Creek

LOE ID:	17607
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41265** **Region 3**

Limekiln Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 32

samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 32 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41265, Temperature, water **Region 3**

Limekiln Creek

LOE ID:	18612
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41265, Temperature, water **Region 3**

Limekiln Creek

LOE ID:	12847
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41265, Temperature, water **Region 3**

Limekiln Creek

LOE ID:	12863
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/23/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41265, Temperature, water **Region 3**

Limekiln Creek

LOE ID:	50349
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41118 Region 3

Limekiln Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 26 samples exceed the evaluation guideline for cold freshwater habitat (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 26 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41118, Turbidity Region 3

Limekiln Creek

LOE ID:	50348
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41118, Turbidity **Region 3**

Limekiln Creek

LOE ID:	12846
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41343** **Region 3**

Limekiln Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Two of the 30 samples exceed the water quality objective for Agriculture, one of the 30 samples exceed the water quality objective for Cold Freshwater Habitats, and three of the 30 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 30 samples exceed the water quality objective for Agriculture, one of the 30 samples exceed the water quality objective for Cold Freshwater Habitats, and three of the 30 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	18991
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	18992
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	18990
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	18989
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	10164
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Limekiln Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	10163
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	11284
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	18972
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308-LIMEK-31 - Limekiln Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	11269
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	11283
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Limekiln Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-3/12/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	50378
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	50347
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	50366
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	50363
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41343, pH **Region 3**

Limekiln Creek

LOE ID:	50401
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Limekiln Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Limekiln Creek was collected at 1 monitoring site [308LIM-Limekiln Creek at Limekiln State Park]
Temporal Representation:	Data was collected over the time period 1/14/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Big Creek (Big Sur Coast)**
Water Body ID: **CAR3080005019990223091332**
Water Body Type: **River & Stream**

DECISION ID **36830** **Region 3**
Big Creek (Big Sur Coast)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 10981) and total ammonia (Decision 10983). This decision contains all of the LOEs from those decisions in addition to new LOEs.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data and two aquatic life beneficial uses. Zero of 83 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 93 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 83 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 93 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36830, Ammonia **Region 3**
Big Creek (Big Sur Coast)

LOE ID: 49378

Pollutant: Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36830, Ammonia **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49637
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36830, Ammonia **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	9436
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36830, Ammonia **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	9437
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	53
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 53 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36830, Ammonia **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	9435
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36830, Ammonia **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49603
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries)

	states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46875** **Region 3**

Big Creek (Big Sur Coast)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. One line of evidence is available in the administrative record to assess this indicator. Neither of the 2 samples exceeded the evaluation Guideline (So-Cal IBI) used to interpret the narrative water quality objective for aquatic life protection. The two samples have IBI scores indicating good and very good community structure. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. All other water quality data for Big Creek indicate good conditions for aquatic life. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceeded (fall below) the Index of Biological Integrity (IBI) value of 39 which indicates poor water quality and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2 and to determine a negative impact. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46875, Benthic Community Effects **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	53416
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores in this water body were above 39 and therefore are above the impairment threshold of the Southern California IBI. The IBI score for the sample collected in 2005 is 86 and the IBI score for the sample collected in 2009 is 59.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions. IBI scores of 0-19 indicate very poor condition, scores of 20-39 indicate poor condition, 40-59 indicate fair condition, 60-79 indicate good condition and 80-100 indicate very good condition.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 308BGC-Big Creek at Highway 1
Temporal Representation:	Surveys done on May 4, 2005 and Sept. 2, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	**41495**	**Region 3**
Big Creek (Big Sur Coast)		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 91 samples exceed the The evaluation guideline used to interpret the narrative water quality objective for

bio-stimulation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 91 samples exceed the The evaluation guideline used to interpret the narrative water quality objective for bio-stimulation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41495, Chlorophyll-a **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49604
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring

	site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41495, Chlorophyll-a **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49379
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 41495, Chlorophyll-a **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	9408
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41495, Chlorophyll-a **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	9407
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37093**	**Region 3**
Big Creek (Big Sur Coast)		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 66 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) used to interpret the water quality objective for recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 66 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) used to interpret the water quality objective for recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37093, Escherichia coli (E. coli) **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	18351
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37093, Escherichia coli (E. coli) **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11097
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/8/2005-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37093, Escherichia coli (E. coli) **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11112
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 2/8/2005-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37093, Escherichia coli (E. coli) **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	18337
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37093, Escherichia coli (E. coli) **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49658
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	36907	Region 3
Big Creek (Big Sur Coast)		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 93 samples exceed the water quality objectives for recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 93 samples exceed the water quality objectives for recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36907, Fecal Coliform	**Region 3**
Big Creek (Big Sur Coast)	

LOE ID:	49657
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200

	MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36907, Fecal Coliform **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11094
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36907, Fecal Coliform **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11095
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36907, Fecal Coliform **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49375
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36690**	**Region 3**
Big Creek (Big Sur Coast)		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 96 samples samples exceed the water quality objective for drinking water and zero of the samples exceed the the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 96 samples samples exceed the water quality objective for drinking water and zero of the samples exceed the the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36690, Nitrate **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49531
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36690, Nitrate **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49639
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36690, Nitrate **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	18130
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36690, Nitrate **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	9438
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36690, Nitrate **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49617
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37589	Region 3
Big Creek (Big Sur Coast)		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Zero of 105 samples exceed the Cold and Warm Freshwater Habitat water quality objectives for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 105 samples exceed the Cold and Warm Freshwater Habitat water quality objectives for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved	**Region 3**
Big Creek (Big Sur Coast)	

LOE ID:	49620
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49619
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49534
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49533
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	18215
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	18214
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12955
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12974
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are

	as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12953
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring

	site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12954
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12973

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12952
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12989
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/24/2006. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37589, Oxygen, Dissolved **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12988
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37403** **Region 3**

Big Creek (Big Sur Coast)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 105 samples exceed the evaluation guideline (Moyle 1976) used to interpret the narrative water quality objective for aquatic life protection. With the exception of one outlier at 19.9 degrees C, the water temperature ranges between 7.04 and 17.1 degrees C. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 105 samples exceed the evaluation guideline (Moyle 1976) used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37403, Temperature, water **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12990
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/22/2002-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37403, Temperature, water **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12972
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37403, Temperature, water — Region 3

Big Creek (Big Sur Coast)

LOE ID:	18784
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37403, Temperature, water — Region 3

Big Creek (Big Sur Coast)

LOE ID:	49636
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41720**	**Region 3**
Big Creek (Big Sur Coast)		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 86 samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life protection. Turbidity measurements for Big Creek range from 0.10 - 22.0 NTUs. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 86 samples exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41720, Turbidity **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12971
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41720, Turbidity **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	12970
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	48
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 48 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41720, Turbidity **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49552
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41720, Turbidity **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49635
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37502	Region 3
Big Creek (Big Sur Coast)		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Natural Sources
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Sixteen of 98 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and 56 of 98 samples exceed the water quality objectives for Municipal & Domestic Supply and Recreation. However, there are no anthropogenic sources or land uses in this watershed that could cause elevated pH levels, and all other indicators show extremely high water quality in this drainage. The geology of the Big Sur Coast is the likely cause of elevated pH in Big Creek and other Big Sur coastal watersheds. The Big Creek watershed in on the boundary of two formations: Salinian and Franciscan. These are both marine formations composed of CaCO3. In fact, the Franciscan Formation is also refered to as "Muddy Sandstone". Dave Rundio, a Biologist working for the National Marine Fisheries Service, has documented the formation of a calcium carbonate travertine crust on the substrate of Devils Creek (a tributary to Big Creek). This crust is typically scoured away each year in the wet season. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. However, it should be noted that there is no evidence of a controllable source. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The geology of the Big Sur Coast is the likely cause of elevated pH in Big Creek and other Big Sur coastal watersheds and there are no anthropogenic sources in the watershed. 4. Fifty-six of 98 samples exceed the water quality objectives for Municipal & Domestic Supply and Recreation and although the sources is likely natural, this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded. However, staff believe the elevated pH is due to the geology of the watershed and is a natural condition.

Line of Evidence (LOE) for Decision ID 37502, pH	**Region 3**
Big Creek (Big Sur Coast)	

LOE ID:	49621
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	10145
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	54
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 37 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	10146
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	54
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 37 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49376
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 17 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49535
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49656
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 17 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	49659
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 17 of 38 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	19167
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	18857
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	18858
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	18859
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	18860
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308-BIGCR-31 - Big Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11096
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 12 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11113
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/2/2005-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11114
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/2/2005-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11115
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/2/2005-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11116

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/2/2005-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	11130
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 8/2/2005-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	10162
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	54
Number of Exceedances:	37
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 37 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37502, pH **Region 3**

Big Creek (Big Sur Coast)

LOE ID:	10144
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Creek (Big Sur Coast) to determine beneficial use support and results are as follows: 12 of 54 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Creek (Big Sur Coast) was collected at 1 monitoring site [308BGC-Big Creek at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Big Sur River**
Water Body ID: **CAR3080003419990223092819**
Water Body Type: **River & Stream**

DECISION ID **37586** **Region 3**
Big Sur River

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data and two aquatic life beneficial uses in which zero of 118 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Five LOEs summarizes total ammonia data and zero of the 138 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11014) and total ammonia (Decision 11016). This decision contains all of the LOEs from those decisions in addition to new LOEs.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 118 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 138 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**
Big Sur River

LOE ID: 49406

Pollutant: Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	49381
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	49380
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	49407
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	9459
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	13968
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).

Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308AND_CCL - Big Sur at Andrew Molera]
Temporal Representation:	Data was collected over the time period 12/2/2003-6/7/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	9465
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	9409
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	9439
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	9410
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]

Temporal Representation: Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID: 9466

Pollutant: Ammonia (Unionized)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 13

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]

Temporal Representation: Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	49607
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37586, Ammonia **Region 3**

Big Sur River

LOE ID:	49606
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	46876	Region 3
Big Sur River		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this indicator. Three of the 5 samples exceeded the evaluation guideline (Ode et al. 2005) used to interpret the narrative water quality objective. Although, a large body of data for multiple pollutants has been assessed for the Big Sur River, no pollutants are exceeding water quality criteria at a frequency that indicates beneficial use impairment due to a pollutant. Therefore this water body segment cannot be placed onto the 303(d) List as defined in Section 3.9 of the Listing Policy. However, there is evidence that indicates beneficial uses may be potentially threatened. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 5 samples exceeded the Index of Biological Integrity (IBI) value of 39 which indicated poor benthic invertebrate community structure. Although the data indicates beneficial uses may be potentially threatened, pollutants could not be directly associated with the Benthic Community Effects and therefore, in accordance with Section 3.9 of the Listing Policy the waterbody and pollutant combination should not be placed on the 303(d) List. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the Section 303(d) List. Although the data indicates

beneficial uses may be potentially threatened, pollutants could not be directly associated with the Benthic Community Effects and therefore, in accordance with Section 3.9 of the Listing Policy the waterbody and pollutant combination should not be placed on the 303(d) List.

Line of Evidence (LOE) for Decision ID 46876, Benthic Community Effects **Region 3**

Big Sur River

LOE ID:	53403
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Both of the IBI scores in this water body were above 40 and therefore are not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 308BSUxxx-Big Sur River at Peiffer Big Sur State Park USGS gauge
Temporal Representation:	Surveys done on August 5, 2009 and August 5, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46876, Benthic Community Effects **Region 3**

Big Sur River

LOE ID:	53402
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	All three IBI scores are 39 or below and therefore are below the impairment threshold of the Southern California IBI. In 2007, a methods comparison study was conducted in this waterbody and more than one sample was collected at the station, resulting in more than one IBI score. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The IBI score for the RWB sample in 2005 was 36, in 2007 the RWB IBI score was 29, in 2009 the RWB IBI score was 27.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 308BSRxxx-Big Sur River at Andrew Molera foot bridge
Temporal Representation:	Surveys done on May 3, 2005 April, 11 2007 and August 5, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID	**37599**	**Region 3**
Big Sur River		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 110 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 110 samples exceed the water quality objective and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37599, Boron **Region 3**

Big Sur River

LOE ID:	9460
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37599, Boron **Region 3**

Big Sur River

LOE ID:	49554

Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37599, Boron **Region 3**

Big Sur River

LOE ID:	49553
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37599, Boron **Region 3**

Big Sur River

LOE ID:	9440
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-

	Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-7/25/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 46877 Region 3

Big Sur River

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 51 samples exceed the site specific water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 51 samples exceed the site specific water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46877, Chloride Region 3

Big Sur River

LOE ID:	49398
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46877, Chloride **Region 3**

Big Sur River

LOE ID:	49399
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41550	Region 3
Big Sur River		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 123 samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 123 samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a	**Region 3**
Big Sur River	

LOE ID:	9463
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a **Region 3**

Big Sur River

LOE ID:	13027
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected on a single day 7/7/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a **Region 3**

Big Sur River

LOE ID:	9456
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast

	Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a **Region 3**

Big Sur River

LOE ID:	13026
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected on a single day 7/7/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a **Region 3**

Big Sur River

LOE ID:	9455
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a **Region 3**

Big Sur River

LOE ID:	9464
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a **Region 3**

Big Sur River

LOE ID:	49409
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a **Region 3**

Big Sur River

LOE ID:	49408
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a **Region 3**

Big Sur River

LOE ID:	49622

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41550, Chlorophyll-a **Region 3**

Big Sur River

LOE ID:	49608
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37433**	**Region 3**
Big Sur River		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Seven of the 124 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) used to interpret the water quality objective for recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 124 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) used to interpret the water quality objective for recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37433, Escherichia coli (E. coli) **Region 3**

Big Sur River

LOE ID:	14050
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Big Sur River to determine beneficial use support and results are as follows: 2 of 38 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308AND_CCL - Big Sur at Andrew Molera]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/7/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37433, Escherichia coli (E. coli) **Region 3**

Big Sur River

LOE ID:	14051
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308AND_CCL - Big Sur at Andrew Molera]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/7/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37433, Escherichia coli (E. coli) **Region 3**

Big Sur River

LOE ID:	18548
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37433, Escherichia coli (E. coli) **Region 3**

Big Sur River

LOE ID:	18549
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37433, Escherichia coli (E. coli) **Region 3**

Big Sur River

LOE ID:	49390

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 3 of 43 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37433, Escherichia coli (E. coli) **Region 3**

Big Sur River

LOE ID:	49391
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.

Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37433, Escherichia coli (E. coli) Region 3

Big Sur River

LOE ID:	11191
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/11/2005-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37433, Escherichia coli (E. coli) Region 3

Big Sur River

LOE ID:	11192
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/11/2005-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37450** **Region 3**

Big Sur River

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the

124 samples exceed the water quality objective for not contact recreation and 7 of the 124 samples exceed the water quality objective for contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 124 samples exceed the water quality objective for not contact recreation and 7 of the 124 samples exceed the water quality objective for contact recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37450, Fecal Coliform **Region 3**

Big Sur River

LOE ID:	49395
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37450, Fecal Coliform **Region 3**

Big Sur River

LOE ID:	49388
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 4 of 43 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37450, Fecal Coliform **Region 3**

Big Sur River

LOE ID:	49389
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37450, Fecal Coliform **Region 3**

Big Sur River

LOE ID:	11132
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37450, Fecal Coliform **Region 3**

Big Sur River

LOE ID:	11207
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37450, Fecal Coliform **Region 3**

Big Sur River

LOE ID:	11208
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37450, Fecal Coliform **Region 3**

Big Sur River

LOE ID:	11131
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 3 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37450, Fecal Coliform **Region 3**

Big Sur River

LOE ID:	49394
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37451**	**Region 3**
Big Sur River		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 169 sample exceed the water quality objectives for agriculture and drinking water. Fifty-two of those samples (the most recent 4 years of data) were also evaluated for risk of nutrient caused bio-stimulation (e.g. nuisance algal growth and resulting negative effects to aquatic life). Zero of the 52 samples exceeded the evaluation guideline (Nutrient Numeric Endpoint Model, TetraTech 2006) used to interpret the narrative water quality objective for bio-stimulatory substances. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 169 sample exceed the water quality objectives for agriculture and drinking water and zero of the 52 samples exceeded the evaluation guideline (Nutrient Numeric Endpoint Model, TetraTech 2006) used to interpret the narrative water quality objective for bio-stimulatory substances. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37451, Nitrate — Region 3

Big Sur River

LOE ID:	49410
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate — Region 3

Big Sur River

LOE ID:	13958
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308AND_CCL - Big Sur at Andrew Molera]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/7/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49412
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49413
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111

	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	18393
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37451, Nitrate — Region 3

Big Sur River

LOE ID:	18394
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37451, Nitrate — Region 3

Big Sur River

LOE ID:	49382
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49383
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49384
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49385
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49571
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49572
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate — Region 3

Big Sur River

LOE ID:	49573
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate — Region 3

Big Sur River

LOE ID:	49640
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	9441
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	9461
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-

	Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	9462
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	9442
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	13974
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	38
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308AND_CCL - Big Sur at Andrew Molera]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/7/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49411
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate

	as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49588
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49625
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49623
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37451, Nitrate **Region 3**

Big Sur River

LOE ID:	49624
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**46878**	**Region 3**
Big Sur River		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 52 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 52 samples exceed the water quality objective and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46878, Nitrogen, Nitrite **Region 3**

Big Sur River

LOE ID:	49590
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46878, Nitrogen, Nitrite **Region 3**

Big Sur River

LOE ID:	49589
Pollutant:	Nitrogen, Nitrite

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36617**	**Region 3**
Big Sur River		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-two lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. One of 144 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and 0 of the 144 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use

support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 144 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, zero of the 144 samples exceeded the Warm Freshwater Habitat. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	49414
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved — Region 3

Big Sur River

LOE ID:	12776
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved — Region 3

Big Sur River

LOE ID:	49416
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 1 of 43 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	49417
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	12777
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	13042
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308BSR-Big Sur River at Andrew Molera foot bridge, 308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	13043
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308BSR-Big Sur River at Andrew Molera foot bridge, 308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	18173
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	18174
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	49641
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	43

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 1 of 43 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	49642
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	49643
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 1 of 43 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	49644
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	13044
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308BSR-Big Sur River at Andrew Molera foot bridge, 308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	13028
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308BSR-Big Sur River at Andrew Molera foot bridge, 308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved — Region 3

Big Sur River

LOE ID:	13007
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved — Region 3

Big Sur River

LOE ID:	13008
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	12991
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	12992
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	12792
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	12775
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36617, Oxygen, Dissolved **Region 3**

Big Sur River

LOE ID:	49415
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **46879** **Region 3**

Big Sur River

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 51 samples exceed the site specific water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 51 samples exceed the site specific water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46879, Sodium **Region 3**

Big Sur River

LOE ID:	49403
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to

	determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46879, Sodium **Region 3**

Big Sur River

LOE ID:	49402
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

appropriate.

QAPP Information Reference(s): Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37415	Region 3
Big Sur River		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 138 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 138 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37415, Specific Conductivity	**Region 3**
Big Sur River	

LOE ID:	49570
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the

	criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37415, Specific Conductivity **Region 3**

Big Sur River

LOE ID:	11133
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37415, Specific Conductivity **Region 3**

Big Sur River

LOE ID:	11170
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37415, Specific Conductivity — Region 3

Big Sur River

LOE ID:	11209
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37415, Specific Conductivity — Region 3

Big Sur River

LOE ID:	17589
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37415, Specific Conductivity **Region 3**

Big Sur River

LOE ID:	49555
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when

	conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36827** **Region 3**

Big Sur River

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 144 samples exceed the evaluation guideline (Moyle 1976) used to interpret the aquatic life water quality objective. The range of water temperature measurements from in this waterbody ranges is 6.2 Â– 20.9 degrees C. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 144 samples exceed the evaluation guideline (Moyle 1976) used to interpret the aquatic life water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36827, Temperature, water **Region 3**

Big Sur River

LOE ID:	13025

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36827, Temperature, water **Region 3**

Big Sur River

LOE ID:	12774
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0

	of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308BSR-Big Sur River at Andrew Molera foot bridge, 308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36827, Temperature, water **Region 3**

Big Sur River

LOE ID:	18578
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36827, Temperature, water **Region 3**

Big Sur River

LOE ID:	12809
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36827, Temperature, water **Region 3**

Big Sur River

LOE ID:	49664
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36827, Temperature, water **Region 3**

Big Sur River

LOE ID:	49663
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Water Temperature.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**46880**	**Region 3**
Big Sur River		

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-three of the 51 samples exceed the site specific water quality objective however; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for each LOE and the results are as follows: In LOE 49401 the single annual mean did not exceed the site specific water quality objective and in LOE 49400, 3 of the 4 annual means did exceed the site specific water quality objective. In summary, 3 of the 5 annual means calculated for these data exceed the site specific water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 5 annual means calculated for the samples exceeded the site specific water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples (annual means) is needed to determine if a beneficial use is supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46880, Total Dissolved Solids **Region 3**

Big Sur River

LOE ID:	49401
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 3 of 10 individual samples exceed the criterion for Dissolved Solids, Total. However the annual mean for the 10 samples collected in 2009 was 188 mg/L, below the water quality objective.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 200 mg/L as an annual mean.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 46880, Total Dissolved Solids **Region 3**

Big Sur River

LOE ID:	49400
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41

Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 20 of 41 individual samples exceed 200 mg/L. However, annual means were calculated for each year and three of the four means exceed 200 mg/L total dissolved solids.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 200 mg/L as an annual mean.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**46895**	**Region 3**
Big Sur River		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline used to interpret the narrative water quality objective set to protect for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed for application of table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the evaluation guideline used to interpret the narrative water quality objective set to protect for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 46895, Toxicity **Region 3**

Big Sur River

LOE ID:	53404
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Two samples were collected to evaluate water toxicity. None of the samples exhibited significant toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 308BSRxxx.
Temporal Representation:	The samples were collected in March and September 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID **41551** **Region 3**

Big Sur River

Pollutant: **Turbidity**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Six of the 120 samples and 5 of the 120 sample exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 120 samples and 5 of the 120 sample exceed the evaluation guidelines used to interpret the narrative water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	49662
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon.

	Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	49661
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 5 of 43 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	12773
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	13046
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0

	of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/31/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	13011
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 2 of 50 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	49421
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	49420
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 4 of 43 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	12795
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	12794
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41551, Turbidity **Region 3**

Big Sur River

LOE ID:	13010
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	50
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 2 of 50 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37511** **Region 3**

Big Sur River

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty-six lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Six of the 135 samples exceed the water quality objective for Agricultural Supply, 5 of the 135 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and 14 of the 135 samples exceed the water quality objectives for Recreation and for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 135 samples exceed the water quality objective for Agricultural Supply, 5 of the 135 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and 14 of the 135 samples exceed the water quality objectives for Recreation and for Municipal and Domestic Supply and thse do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11210
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11225
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11226
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11149
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11150
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11151
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 8 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	11152
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 8 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	11153
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 8 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11169
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11171
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11172
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11188
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0

	of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11189
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]

Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11190
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11173
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 7/7/2001-8/3/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11227
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and

	Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	11228
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	11229
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Big Sur River to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	19168
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	19169
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-

	BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	19170
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	19171
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	19151
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	19152
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 2 monitoring sites [308-BIGSU-31 - Big Sur River at Andrew Molera Park, 308-BIGSU-32 - Big Sur R. near Whaling Bridge at J. Pfifer St park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	49386
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 2 of 43 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	49387
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for pH.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	49660
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	49645
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 2 of 43 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	49392
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 2 of 43 samples exceed the criterion for pH.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	49393
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	49396
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	43
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 2 of 43 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	49397
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for pH.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	49418
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 2 of 43 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	49419
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH — Region 3

Big Sur River

LOE ID:	49605
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for pH.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSU-Big Sur River at Pfeiffer Big Sur State Park, Weyland Camp]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37511, pH **Region 3**

Big Sur River

LOE ID:	49591
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Big Sur River to determine beneficial use support and results are as follows: 2 of 43 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308BSR-Big Sur River at Andrew Molera foot bridge]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 37432 Region 3

Big Sur River

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 38 samples exceed the water quality objectives for Water Contact Recreation and Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 38 samples exceed the water quality objectives for Water Contact Recreation and Non-Contact Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37432, Enterococcus Region 3

Big Sur River

LOE ID:	14191
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308AND_CCL - Big Sur at Andrew Molera].
Temporal Representation:	Data was collected monthly over the time period 1/22/2002-6/7/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37432, Enterococcus **Region 3**

Big Sur River

LOE ID:	14192
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Big Sur River to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Big Sur River was collected at 1 monitoring site [308AND_CCL - Big Sur at Andrew Molera]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/7/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Little Sur River**
Water Body ID: **CAR3080002319980825130201**
Water Body Type: **River & Stream**

DECISION ID **41011** **Region 3**
Little Sur River

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Three LOEs summarize unionized ammonia data in which zero of the 81 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 85 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 81 samples exceed the water quality objective for unionized ammonia and zero of the 85 samples exceed the EPA's Lifetime Health advisory level for total ammonia. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41011, Ammonia **Region 3**
Little Sur River

LOE ID: 9453

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41011, Ammonia **Region 3**

Little Sur River

LOE ID:	9478
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41011, Ammonia **Region 3**

Little Sur River

LOE ID:	9477
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]

Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41011, Ammonia **Region 3**

Little Sur River

LOE ID:	9454
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41011, Ammonia **Region 3**

Little Sur River

LOE ID:	50839
Pollutant:	Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41011, Ammonia **Region 3**

Little Sur River

LOE ID:	50800
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41019** **Region 3**

Little Sur River

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 79 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 79 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41019, Boron **Region 3**

Little Sur River

LOE ID:	50765

Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41019, Boron **Region 3**

Little Sur River

LOE ID:	9479
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41019, Boron **Region 3**

Little Sur River

LOE ID:	9473
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41154 Region 3

Little Sur River

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 79 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 79 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41154, Chloride Region 3

Little Sur River

LOE ID:	9480
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41154, Chloride **Region 3**

Little Sur River

LOE ID:	9474
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41154, Chloride **Region 3**

Little Sur River

LOE ID:	50766
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42113	Region 3
Little Sur River		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 84 samples exceed the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 84 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42113, Chlorophyll-a	**Region 3**
Little Sur River	

LOE ID:	50801
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42113, Chlorophyll-a **Region 3**

Little Sur River

LOE ID:	12883
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42113, Chlorophyll-a **Region 3**

Little Sur River

LOE ID:	9476
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40994** **Region 3**

Little Sur River

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Three of 66 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 25 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 66 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 25 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40994, Escherichia coli (E. coli) **Region 3**

Little Sur River

LOE ID:	11044
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/11/2005-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40994, Escherichia coli (E. coli) **Region 3**

Little Sur River

LOE ID:	11043
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/11/2005-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40994, Escherichia coli (E. coli) **Region 3**

Little Sur River

LOE ID:	50859
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42247** **Region 3**

Little Sur River

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Three of 84 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 1 of 84 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 84 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 1 of 84 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42247, Fecal Coliform **Region 3**

Little Sur River

LOE ID:	50861
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to

	determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42247, Fecal Coliform **Region 3**

Little Sur River

LOE ID:	50858
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42247, Fecal Coliform **Region 3**

Little Sur River

LOE ID:	11285
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42247, Fecal Coliform **Region 3**

Little Sur River

LOE ID:	11060
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42247, Fecal Coliform **Region 3**

Little Sur River

LOE ID:	11022
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42247, Fecal Coliform **Region 3**

Little Sur River

LOE ID:	11045
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42083	Region 3
Little Sur River		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 85 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 41 nitrate samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use. Zero of the 40 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 40 nitrate/nitrite samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. Insufficient evidence was found to support nitrate as a cause of impairment for Cold or Warm Freshwater habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 85 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 41 nitrate samples exceed the water quality objectives for the Cold Freshwater Habitat beneficial use. Zero of the 40 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 40 nitrate/nitrite samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	9482
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	9472
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	9481
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	9471
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	50842
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	50782
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	50781
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	50802
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	50819
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42083, Nitrate **Region 3**

Little Sur River

LOE ID:	50841
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47772** **Region 3**

Little Sur River

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 41 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 41 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47772, Nitrogen, Nitrite **Region 3**

Little Sur River

LOE ID:	50783
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42115** **Region 3**

Little Sur River

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One of the 85 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 85 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42115, Oxygen, Dissolved **Region 3**

Little Sur River

LOE ID:	50821
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 2 of 41 samples exceed the

	criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42115, Oxygen, Dissolved **Region 3**

Little Sur River

LOE ID:	50820
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42115, Oxygen, Dissolved **Region 3**

Little Sur River

LOE ID:	12884
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42115, Oxygen, Dissolved **Region 3**

Little Sur River

LOE ID:	12865
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 1 of 43 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42115, Oxygen, Dissolved **Region 3**

Little Sur River

LOE ID:	12899
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42115, Oxygen, Dissolved **Region 3**

Little Sur River

LOE ID:	12864
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	40979	Region 3
Little Sur River		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 79 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 79 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40979, Sodium	**Region 3**
Little Sur River	

LOE ID:	9483
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40979, Sodium **Region 3**

Little Sur River

LOE ID:	9475
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40979, Sodium **Region 3**

Little Sur River

LOE ID:	50799
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42117** **Region 3**

Little Sur River

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 85 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 85 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42117, Specific Conductivity **Region 3**

Little Sur River

LOE ID:	50767
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42117, Specific Conductivity **Region 3**

Little Sur River

LOE ID:	11023
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]

Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42117, Specific Conductivity **Region 3**

Little Sur River

LOE ID:	11061
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42093 **Region 3**

Little Sur River

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 84 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 84 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42093, Temperature, water **Region 3**

Little Sur River

LOE ID:	12882
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 43 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters,

	Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42093, Temperature, water **Region 3**

Little Sur River

LOE ID:	12902
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42093, Temperature, water **Region 3**

Little Sur River

LOE ID:	50838
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42169** **Region 3**

Little Sur River

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Four of the 78 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 78 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42169, Turbidity **Region 3**

Little Sur River

LOE ID:	50823
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42169, Turbidity **Region 3**

Little Sur River

LOE ID:	12901
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42169, Turbidity **Region 3**

Little Sur River

LOE ID:	12881
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 1 of 36 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41047**	**Region 3**
Little Sur River		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Seven of the 84 samples exceed the water quality objective for Agriculture, five of the 84 samples exceed the water quality objective for Cold Freshwater Habitats, and ten of the 84 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 84 samples exceed the water quality objective for Agriculture, five of the 84 samples exceed the water quality objective for Cold Freshwater Habitats, and ten of the 84 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11041
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 7 of 42 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11079
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11080
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11062
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11024
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 4 of 42 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11064
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11025
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 2 of 42

	samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11026
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 7 of 42 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]

Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11042
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	42
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Little Sur River to determine beneficial use support and results are as follows: 7 of 42 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/4/2002-12/19/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	11063
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Little Sur River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSU-Little Sur River at Old Coast Road]
Temporal Representation:	Data was collected on a single day 2/5/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	50822
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	50843
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	50862
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	50860
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41047, pH **Region 3**

Little Sur River

LOE ID:	50784
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Little Sur River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Sur River was collected at 1 monitoring site [308LSR-Little Sur River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Jose Creek (Monterey County)**
Water Body ID: **CAR3080001420020124140020**
Water Body Type: **River & Stream**

DECISION ID **39980** **Region 3**
San Jose Creek (Monterey County)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 21 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 22 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 21 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 22 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39980, Ammonia **Region 3**
San Jose Creek (Monterey County)

LOE ID: 9488

Pollutant: Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39980, Ammonia **Region 3**

San Jose Creek (Monterey County)

LOE ID:	9486
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39980, Ammonia **Region 3**

San Jose Creek (Monterey County)

LOE ID:	9487
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39980, Ammonia **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51505
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39980, Ammonia **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51494
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39980, Ammonia **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51727
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries)

	states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39710 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39710, Boron Region 3

San Jose Creek (Monterey County)

LOE ID:	51695
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39710, Boron **Region 3**

San Jose Creek (Monterey County)

LOE ID:	9489
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as

	follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-7/25/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39766 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39766, Chloride **Region 3**

San Jose Creek (Monterey County)

LOE ID:	9490
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-7/25/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39766, Chloride **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51709
Pollutant:	Chloride

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39767 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 23 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial

uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 23 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39767, Chlorophyll-a **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51506
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39767, Chlorophyll-a **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51740
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39767, Chlorophyll-a **Region 3**

San Jose Creek (Monterey County)

LOE ID:	9495
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39767, Chlorophyll-a **Region 3**

San Jose Creek (Monterey County)

LOE ID:	9494
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 48001 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses, however, this sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48001, Chlorpyrifos **Region 3**

San Jose Creek (Monterey County)

LOE ID:	47701
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [San Jose Creek at Private Road Access (north of Point Lobos) - 308SJCxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48001, Chlorpyrifos **Region 3**

San Jose Creek (Monterey County)

LOE ID:	47723
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One sample result was not used in the assessment because the laboratory method detection limit was above the guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [San Jose Creek at Private Road Access (north of Point Lobos) - 308SJCxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47232 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample (pore water) did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy, nor will LOEs summarizing pore water result in the sole basis for any decision. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47232, Diazinon **Region 3**

San Jose Creek (Monterey County)

LOE ID:	47695
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [San Jose Creek at Private Road Access (north of Point Lobos) - 308SJCxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47232, Diazinon **Region 3**

San Jose Creek (Monterey County)

LOE ID:	47642
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed SWAMP data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [San Jose Creek at Private Road Access (north of Point Lobos) - 308SJCxxx]
Temporal Representation:	Data was collected on a single day 5/14/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 39826 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of 15 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 4 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 15 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 4 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39826, Escherichia coli (E. coli) **Region 3**

San Jose Creek (Monterey County)

LOE ID:	18315
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39826, Escherichia coli (E. coli) **Region 3**

San Jose Creek (Monterey County)

LOE ID:	18301
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39826, Escherichia coli (E. coli) **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51500
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11

	samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **39123** **Region 3**

San Jose Creek (Monterey County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 22 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 0 of 22 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 22 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 22 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39123, Fecal Coliform **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51502
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39123, Fecal Coliform **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51499
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39123, Fecal Coliform **Region 3**

San Jose Creek (Monterey County)

LOE ID:	11102
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39123, Fecal Coliform **Region 3**

San Jose Creek (Monterey County)

LOE ID:	11117
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39293 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 11 nitrate samples exceed the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 11 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 11 nitrate/nitrite samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 nitrate samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. Zero of the 11 nitrate samples exceed the water quality objectives for the Cold and Warm Freshwater Habitat beneficial uses. Zero of the 11 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 11 nitrate/nitrite samples exceed the water quality objective for the Cold and Warm Freshwater Habitat beneficial uses. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39293, Nitrate Region 3

San Jose Creek (Monterey County)

LOE ID:	9491
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39293, Nitrate **Region 3**

San Jose Creek (Monterey County)

LOE ID:	18344
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39293, Nitrate **Region 3**

San Jose Creek (Monterey County)

LOE ID:	18345
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39293, Nitrate **Region 3**

San Jose Creek (Monterey County)

LOE ID:	9492
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39293, Nitrate **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51711
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39293, Nitrate **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51496
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39293, Nitrate **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51508
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]

Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39293, Nitrate **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51507
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39293, Nitrate — Region 3

San Jose Creek (Monterey County)

LOE ID:	51497
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39293, Nitrate — Region 3

San Jose Creek (Monterey County)

LOE ID:	51742
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate/Nitrite as N.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39293, Nitrate **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51741
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53467** **Region 3**

San Jose Creek (Monterey County)

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53467, Nitrogen, Nitrite — Region 3

San Jose Creek (Monterey County)

LOE ID:	51724
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39854 — Region 3

San Jose Creek (Monterey County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Fourteen lines of evidence are available in the administrative record to assess this pollutant. Two of the 28 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 28 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 28 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 28 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51743
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51510
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51509
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51490
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1

	monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12957
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	18178

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	18179
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12996
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 8/15/2002-8/16/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12995
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 8/15/2002-8/16/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12994
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 8/15/2002-8/16/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12993
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and

	Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 8/15/2002-8/16/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12960
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12958
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39854, Oxygen, Dissolved **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12959
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39733 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 19 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 19 samples exceed the water quality objective and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39733, Sodium **Region 3**

San Jose Creek (Monterey County)

LOE ID:	9493
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-7/25/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39733, Sodium **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51726
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39901 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 25 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39901, Specific Conductivity **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51710
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39901, Specific Conductivity **Region 3**

San Jose Creek (Monterey County)

LOE ID:	17409
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39901, Specific Conductivity **Region 3**

San Jose Creek (Monterey County)

LOE ID:	11118
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39925 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 27 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 27 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39925, Temperature, water **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12997
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 8/15/2002-8/16/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39925, Temperature, water **Region 3**

San Jose Creek (Monterey County)

LOE ID:	18767
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39925, Temperature, water **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12978
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39925, Temperature, water **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51493
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53468** **Region 3**

San Jose Creek (Monterey County)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. One of the one sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53468, Toxicity **Region 3**

San Jose Creek (Monterey County)

LOE ID:	57808
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity and the sample exhibited significant toxicity Hyalella Azteca growth. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at stations 308SJCxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53468, Toxicity **Region 3**

San Jose Creek (Monterey County)

LOE ID:	80330
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity and the sample exhibited significant toxicity Hyalella Azteca growth. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at stations 308SJCxxx.
Temporal Representation:	The sample was collected in May 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP was followed.
QAPP Information Reference(s):	

DECISION ID 39842 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 0 of the 22 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 22 samples exceed the evaluation guideline for both Cold and Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39842, Turbidity **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51492
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39842, Turbidity **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51512

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39842, Turbidity **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12977
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39842, Turbidity **Region 3**

San Jose Creek (Monterey County)

LOE ID:	12976
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36596 Region 3

San Jose Creek (Monterey County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Four of the 26 samples exceed the water quality objectives for Cold Freshwater Habitat and Warm Freshwater Habitat, and 1 of the 26 samples exceeded the water quality objectives for Agricultural Supply, Drinking Water, and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 26 samples exceed the water quality objectives for Cold Freshwater Habitat and Warm Freshwater Habitat, and 1 of the 26 samples exceeded the water quality objectives for Agricultural Supply, Drinking Water, and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36596, pH Region 3

San Jose Creek (Monterey County)

LOE ID:	19082
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	19083
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	19084
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	19085
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	19086
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	19102
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308-SANJO-31 - San Jose Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	11119

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	11120
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	11134
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1

	monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	11135
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	11136
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	11286
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51511
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51498
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51503
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11

samples exceed the criterion for pH.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51501
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51725
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36596, pH **Region 3**

San Jose Creek (Monterey County)

LOE ID:	51491
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Jose Creek (Monterey County) to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Jose Creek (Monterey County) was collected at 1 monitoring site [308SJC-San Jose Creek at Private Road Access]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 52519 Region 3

San Jose Creek (Monterey County)

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 and 3.1 of the Listing Policy. Under section 3.9, an additional line of evidence associating Benthic Community Effects with a water or sediment concentration of pollutant(s) is necessary to assess listing status. Based on the readily available data and information, the weight of evidence provides sufficient justification for not placing Benthic Community Effects in this water segment on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pursuant to section 3.9 of the Listing Policy, the water does not exhibit significant degradation in biological populations and/or communities as compared to reference site(s) using the SoCal IBI. 4. Pursuant to section 3.9 of the Listing Policy, the water segment does not have associated pollutant(s) samples that exceed water quality objectives. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not being met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. Furthermore, what data is available does not indicate that the

benthic community exhibits degradation when compared to reference.

Line of Evidence (LOE) for Decision ID 52519, Benthic Community Effects **Region 3**

San Jose Creek (Monterey County)

LOE ID:	57807
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The 2 IBI scores in this water body are above 40 and therefore are not below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 308SJCxxx-San Jose Creek at Private Road Access (north of Point Lobos)
Temporal Representation:	Surveys done on May 8, 2009 and June 25, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Palo Colorado Canyon Creek**
Water Body ID: **CAR3080001120020124122459**
Water Body Type: **River & Stream**

DECISION ID **41036** **Region 3**
Palo Colorado Canyon Creek

Pollutant: **Electrical Conductivity**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Agricultural Supply water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41036, Electrical Conductivity **Region 3**
Palo Colorado Canyon Creek

LOE ID: 17628

Pollutant: Electrical Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41243**	**Region 3**
Palo Colorado Canyon Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 4 samples exceed the water quality objective for Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 4 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using

	Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41243, Escherichia coli (E. coli) **Region 3**

Palo Colorado Canyon Creek

LOE ID:	17597
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41243, Escherichia coli (E. coli) **Region 3**

Palo Colorado Canyon Creek

LOE ID:	17581
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41367**	**Region 3**
Palo Colorado Canyon Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal & Domestic Supply or Agricultural Supply water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal & Domestic Supply or Agricultural Supply water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41367, Nitrate **Region 3**

Palo Colorado Canyon Creek

LOE ID:	18470
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41367, Nitrate **Region 3**

Palo Colorado Canyon Creek

LOE ID:	18486
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41196**	**Region 3**
Palo Colorado Canyon Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Freshwater Habitat water quality objectives. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Freshwater Habitat water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41196, Oxygen, Dissolved **Region 3**

Palo Colorado Canyon Creek

LOE ID:	17997
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41196, Oxygen, Dissolved **Region 3**

Palo Colorado Canyon Creek

LOE ID:	17998
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41375**	**Region 3**
Palo Colorado Canyon Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41375, Temperature, water **Region 3**

Palo Colorado Canyon Creek

LOE ID:	18650
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	41667	Region 3
Palo Colorado Canyon Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41667, pH	**Region 3**
Palo Colorado Canyon Creek	

LOE ID:	18869
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41667, pH **Region 3**

Palo Colorado Canyon Creek

LOE ID:	18890
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41667, pH **Region 3**

Palo Colorado Canyon Creek

LOE ID:	18889
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41667, pH **Region 3**

Palo Colorado Canyon Creek

LOE ID:	18870
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41667, pH **Region 3**

Palo Colorado Canyon Creek

LOE ID:	18871
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41667, pH **Region 3**

Palo Colorado Canyon Creek

LOE ID:	18888
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Palo Colorado Canyon Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Palo Colorado Canyon Creek was collected at 1 monitoring site [308-PALOC-31 - Palo Colorado Canyon]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Garrapata Creek**
Water Body ID: **CAR3080001119990304101020**
Water Body Type: **River & Stream**

DECISION ID **39594** **Region 3**
Garrapata Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 23 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Five LOEs summarize total ammonia data and zero of the 26 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 23 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 26 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39594, Ammonia **Region 3**
Garrapata Creek

LOE ID: 9458

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39594, Ammonia **Region 3**

Garrapata Creek

LOE ID:	9457
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39594, Ammonia **Region 3**

Garrapata Creek

LOE ID:	50509
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-11/10/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39594, Ammonia **Region 3**

Garrapata Creek

LOE ID:	50546
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40083** **Region 3**

Garrapata Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40083, Chlorophyll-a **Region 3**

Garrapata Creek

LOE ID:	50510
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40083, Chlorophyll-a **Region 3**

Garrapata Creek

LOE ID:	9444
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40314 Region 3

Garrapata Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40314, Escherichia coli (E. coli) Region 3

Garrapata Creek

LOE ID:	18390
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308-GARRA-31 - Garrapata Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40314, Escherichia coli (E. coli) **Region 3**

Garrapata Creek

LOE ID:	18391
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308-GARRA-31 - Garrapata Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40314, Escherichia coli (E. coli) **Region 3**

Garrapata Creek

LOE ID:	50566
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **40036** **Region 3**

Garrapata Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 26 samples exceed the water quality objective for contact recreation (i.e. swimming) and 1 of the 26 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 26 samples exceed the water quality objective for contact recreation (i.e. swimming) and 1 of the 26 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40036, Fecal Coliform **Region 3**

Garrapata Creek

LOE ID:	50568
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40036, Fecal Coliform **Region 3**

Garrapata Creek

LOE ID:	50565
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40036, Fecal Coliform **Region 3**

Garrapata Creek

LOE ID:	11246
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40036, Fecal Coliform **Region 3**

Garrapata Creek

LOE ID:	11245
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40200**	**Region 3**
Garrapata Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 12 nitrate samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 12 nitrate/nitrite samples exceed the water quality objective for Cold Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. Insufficient evidence was found to support nitrate as a cause of impairment for Cold or Warm Freshwater habitats: 1) Dissolved oxygen for this water body ranged from 8.3 mg/L to 13.3 mg/L, never exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and only once exceeding the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Water column chlorophyll a concentration ranged from 0.92 to 3.1 ug/L, never exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13

(Tetratech, 2007) predicted that benthic algal contribution to oxygen deficit, algae biomass, and benthic chlorophyll a concentrations for this water body would not exceed screening thresholds for cold water habitat.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 30 nitrate samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 12 nitrate samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. Zero of the 12 nitrate/nitrite samples exceed the water quality objectives for the Municipal and Domestic Supply beneficial use. Zero of the 12 nitrate/nitrite samples exceed the water quality objective for Cold Freshwater Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40200, Nitrate **Region 3**

Garrapata Creek

LOE ID:	18205
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308-GARRA-31 - Garrapata Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40200, Nitrate **Region 3**

Garrapata Creek

LOE ID:	9443
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40200, Nitrate **Region 3**

Garrapata Creek

LOE ID:	50511
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40200, Nitrate **Region 3**

Garrapata Creek

LOE ID:	50512
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40200, Nitrate **Region 3**

Garrapata Creek

LOE ID:	50548
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40200, Nitrate **Region 3**

Garrapata Creek

LOE ID:	50549
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	40312	Region 3
Garrapata Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 32 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 32 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40312, Oxygen, Dissolved	**Region 3**
Garrapata Creek	

LOE ID:	50529
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40312, Oxygen, Dissolved **Region 3**

Garrapata Creek

LOE ID:	50528
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40312, Oxygen, Dissolved **Region 3**

Garrapata Creek

LOE ID:	18252
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308-GARRA-31 - Garrapata Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40312, Oxygen, Dissolved **Region 3**

Garrapata Creek

LOE ID:	12811
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40312, Oxygen, Dissolved **Region 3**

Garrapata Creek

LOE ID:	12810
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40312, Oxygen, Dissolved **Region 3**

Garrapata Creek

LOE ID:	12828
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 8/15/2002-8/16/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40312, Oxygen, Dissolved **Region 3**

Garrapata Creek

LOE ID:	12827
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 8/15/2002-8/16/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40049**	**Region 3**
Garrapata Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 32 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 32 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40049, Temperature, water **Region 3**

Garrapata Creek

LOE ID:	12829
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 8/15/2002-8/16/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40049, Temperature, water **Region 3**

Garrapata Creek

LOE ID:	18804
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308-GARRA-31 - Garrapata Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40049, Temperature, water **Region 3**

Garrapata Creek

LOE ID:	12826
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40049, Temperature, water **Region 3**

Garrapata Creek

LOE ID:	50532
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40050 — Region 3

Garrapata Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 26 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40050, Turbidity — Region 3

Garrapata Creek

LOE ID:	50531
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40050, Turbidity **Region 3**

Garrapata Creek

LOE ID:	12812
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2

	Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40051 Region 3

Garrapata Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. Two of the 30 samples exceed the water quality objectives for Drinking Water and Recreation. However, Zero of the 30 samples exceed the water quality objective Cold Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 30 samples exceed the water quality objectives for Drinking Water and Recreation. However, Zero of the 30 samples exceed the water quality objective Cold Freshwater Habitats None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40051, pH Region 3

Garrapata Creek

LOE ID:	11249

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	11247
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	11248
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	18986
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308-GARRA-31 - Garrapata Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	11265
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	18984
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308-GARRA-31 - Garrapata Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	18985
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308-GARRA-31 - Garrapata Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	18983
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308-GARRA-31 - Garrapata Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	50530
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	50569
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	50567

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40051, pH **Region 3**

Garrapata Creek

LOE ID:	50550
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Garrapata Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Garrapata Creek was collected at 1 monitoring site [308GAR-Garapata Creek at Garapata Creek Road]
Temporal Representation:	Data was collected over the time period 1/13/2009-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Rocky Creek**
Water Body ID: **CAR3080001020020124131030**
Water Body Type: **River & Stream**

DECISION ID **40938** **Region 3**
Rocky Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40938, Escherichia coli (E. coli) **Region 3**
Rocky Creek

LOE ID: 18496

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40938, Escherichia coli (E. coli) Region 3

Rocky Creek

LOE ID:	18497
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-

	ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40721 Region 3

Rocky Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal & Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal & Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40721, Nitrate Region 3

Rocky Creek

LOE ID:	18326
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40727**	**Region 3**
Rocky Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the water quality objectives for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the four samples exceed the water quality objectives and this does not exceed the allowable

frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40727, Oxygen, Dissolved **Region 3**

Rocky Creek

LOE ID:	18138
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40727, Oxygen, Dissolved **Region 3**

Rocky Creek

LOE ID:	18137
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40769**	**Region 3**
Rocky Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40769, Temperature, water **Region 3**

Rocky Creek

LOE ID:	18777
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40713** **Region 3**

Rocky Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40713, pH **Region 3**

Rocky Creek

LOE ID:	18918
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40713, pH **Region 3**

Rocky Creek

LOE ID:	18916
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40713, pH **Region 3**

Rocky Creek

LOE ID:	18917
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40713, pH **Region 3**

Rocky Creek

LOE ID:	18936
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-

	ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40713, pH **Region 3**

Rocky Creek

LOE ID:	18935
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Rocky Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rocky Creek was collected at 2 monitoring sites [308-ROCKY-31 - Rocky Creek X, 308-ROCKY-32 - Rocky Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Carmel River**
Water Body ID: **CAR3070005019990223142907**
Water Body Type: **River & Stream**

DECISION ID **47082** **Region 3**
Carmel River

Pollutant: **Alkalinity as CaCO3**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47082, Alkalinity as CaCO3 **Region 3**
Carmel River

LOE ID: 53858

Pollutant: Alkalinity as CaCO3
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47082, Alkalinity as CaCO3 **Region 3**

Carmel River

LOE ID:	53859
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel

	River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 37183 Region 3
Carmel River

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11329) and total ammonia (Decision 11331). This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Sixteen lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Ten LOEs summarize unionized ammonia data in which zero of the 126 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Six LOEs summarize total ammonia data and zero of the 161 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 126 samples exceed the Basin Plan general objective for unionized ammonia and zero of the 161 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37183, Ammonia Region 3
Carmel River

LOE ID:	53860
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	53861
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel

	River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	53862
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	49890
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	49891
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-

	Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	49685
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	49711
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	49710
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	49954
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	9393
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	9417

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	9418
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	9419
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]

Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	9394
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	9411

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37183, Ammonia **Region 3**

Carmel River

LOE ID:	13952
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Carmel River to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Ammonia As N, Total.

Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 2 monitoring sites [307CML_CCL - Carmel River Hwy 1, 307GAR_CCL - Carmel River Garland Park]
Temporal Representation:	Data was collected over the time period 12/2/2003-5/11/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID	37412	Region 3
Carmel River		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Zero of the 4 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37412, Arsenic — Region 3

Carmel River

LOE ID:	15639
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37412, Arsenic — Region 3

Carmel River

LOE ID:	15720
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37412, Arsenic **Region 3**

Carmel River

LOE ID:	15626
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37412, Arsenic **Region 3**

Carmel River

LOE ID:	15721
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37412, Arsenic **Region 3**

Carmel River

LOE ID:	53868
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37412, Arsenic **Region 3**

Carmel River

LOE ID:	53869
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47083**	**Region 3**
Carmel River		

Pollutant:	**Benthic Community Effects**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Benthic Community Effects is being considered for placement on the CWA section 303(d) List under sections 3.9 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status. Multiple lines of evidence are available in the administrative record to assess this indicator. Eight samples are evaluated using the Southern California Index of Biotic Integrity (IBI) and five of those samples have IBI scores below the evaluation guideline of 40 indicating poor benthic community condition. Four of these samples are also assessed using the California Stream Condition Index (CSCI) and all for samples score for this site were below the 0.79 threshold for the CSCI, and is therefore exceeding the water quality objective for the aquatic life beneficial use. Although, a large body of data for multiple pollutants has been assessed for the Carmel River, no pollutants are exceeding water quality criteria at a frequency that indicates beneficial use impairment due to a pollutant. Therefore this water body segment cannot be placed onto the 303(d) List as defined in Section 3.9 of the Listing Policy. However, there is evidence that indicates beneficial uses may be potentially threatened. There is documentation in the administrative record of hydromodification and flow alteration in the Carmel River. These factors could contribute to the degraded benthic community condition in the Carmel River but are not considered pollutants and therefore cannot be used under Section 3.9 of the Listing Policy to add this water body segment to the 303(d) List for Benthic Community Effects. These supporting documents include the following: 1. Higgens,P., August 2010, Historic and Present Angler Impacts on Carmel River Steelhead Trout.

Report prepared for the Carmel River Steelhead Association. Included in California Coastkeeper Alliance Letter (Administrative Record Reference number 4125).
2. Becker, G.S. and I.J. Reining. 2008. Steelhead/rainbow trout (Oncorhynchus mykiss) resources south of the Golden Gate, California.
Cartography by D.A. Asbury. Center for Ecosystem Management and Restoration. Oakland, CA.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the eight samples exceeded the IBI evaluation guideline and four of the four samples exceeded the SCSI evaluation guideline. Although the data indicates beneficial uses may be potentially threatened, pollutants could not be directly associated with the Benthic Community Effects and therefore, in accordance with Section 3.9 of the Listing Policy the waterbody and pollutant combination should not be placed on the 303(d) List.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs).

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the waterbody-pollutant combination should not be placed on the Section 303(d) List. Although the data indicates beneficial uses may be potentially threatened, pollutants could not be directly associated with the Benthic Community Effects and therefore, in accordance with Section 3.9 of the Listing Policy the waterbody and pollutant combination should not be placed on the 303(d) List.

Line of Evidence (LOE) for Decision ID 47083, Benthic Community Effects **Region 3**

Carmel River

LOE ID:	53872
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the 3 IBI scores in this water body was 39 or lower and therefore was below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the

	Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following stations: 307CMNxxx-Carmel River @ Nason Rd Community Park 307CMUxxx-Carmel River at Esquiline Road
Temporal Representation:	Surveys done on Sept. 3, 2009; July 29, 2010; and June 16, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47083, Benthic Community Effects **Region 3**

Carmel River

LOE ID:	53870
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The IBI score for this site was 27.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. RG 3 BP
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	The sample was collected from Carmel River.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Perennial Streams Assessment 2008 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47083, Benthic Community Effects **Region 3**

Carmel River

LOE ID:	53871
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three of the four IBI scores are 39 or below and therefore are below the impairment threshold of the Southern California IBI. In 2005 and 2007, a methods comparison study was conducted in this water body resulting in sample events where more than one sample was collected at a station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The IBI score for the RWB sample in 2005 was 11, in 2007 the RWB IBI score was 29, in 2009 the RWB IBI score was 26 and in 2010 the RWB IBI score was 44.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 307CMLxxx-Carmel River at Highway 1
Temporal Representation:	Surveys done on May 3, 2005; April 11, 2007; April 11, 2007; May 5, 2009; June 29, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47083, Benthic Community Effects **Region 3**

Carmel River

LOE ID:	79203
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Four of 4 of the CSCI score for this site were below the 0.79 threshold, and is therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Coastal Confluences 2008 2009

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health.Â The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded biological condition) to greater than 1 (healthy biological condition and equivalent to reference).Â CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact healthy biological condition, 0.91 to 0.80 = possibly altered degraded biological condition, 0.79 to 0.63 = likely altered degraded biological condition, less than or equal to 0.62 = very likely altered degraded biological condition.Â Sites with scores below 0.79 are considered to have exceeded the water quality objective impaired for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	Surveys done at the following station: 307CMLxxx-Carmel River at Highway 1
Temporal Representation:	Surveys done on May 3, 2005; April 11, 2007; April 11, 2007; May 5, 2009; June 29, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47083, Benthic Community Effects **Region 3**

Carmel River

LOE ID:	79150
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for this site are 0.435677850796369, 0.623591380220983, 0.523171463962085, and 0.722928573716223. All four of the samples score below the 0.79 threshold, and are therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. RG 3 BP
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference).

	CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.
Spatial Representation:	The samples were collected from station 307CMLxxx.
Temporal Representation:	The samples were collected on the following dates: May 3 2005, Apr 11 2007, May 5 2009, and Jun 29 2010.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Perennial Streams Assessment 2008 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47083, Benthic Community Effects **Region 3**

Carmel River

LOE ID:	79151
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three of the four IBI scores are 39 or below and therefore are below the impairment threshold of the Southern California IBI. In 2005 and 2007, a methods comparison study was conducted in this water body resulting in sample events where more than one sample was collected at a station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The IBI score for the RWB sample in 2005 was 11, in 2007 the RWB IBI score was 29, in 2009 the RWB IBI score was 26 and in 2010 the RWB IBI score was 44.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 307CMLxxx-Carmel River at Highway 1
Temporal Representation:	Surveys done on May 3, 2005; April 11, 2007; April 11, 2007; May 5, 2009; June 29, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient

Monitoring Program.

QAPP Information Reference(s):

DECISION ID	47084	Region 3
Carmel River		

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47084, Bifenthrin	**Region 3**
Carmel River	

LOE ID:	53879
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47084, Bifenthrin **Region 3**

Carmel River

LOE ID:	53878
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42480 Region 3

Carmel River

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 114 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 114 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42480, Boron Region 3

Carmel River

LOE ID:	9420
Pollutant:	Boron

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42480, Boron **Region 3**

Carmel River

LOE ID:	49836
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42480, Boron **Region 3**

Carmel River

LOE ID:	49837
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]

Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42480, Boron **Region 3**

Carmel River

LOE ID:	9412
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-7/25/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37362** **Region 3**

Carmel River

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Zero of the 4 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37362, Cadmium **Region 3**

Carmel River

LOE ID:	15505
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37362, Cadmium **Region 3**

Carmel River

LOE ID:	15506
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37362, Cadmium **Region 3**

Carmel River

LOE ID:	15423
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37362, Cadmium **Region 3**

Carmel River

LOE ID:	15424
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37362, Cadmium **Region 3**

Carmel River

LOE ID:	53880
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37362, Cadmium **Region 3**

Carmel River

LOE ID:	53881
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	47085	Region 3
Carmel River		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47085, Chlordane	**Region 3**
Carmel River	

LOE ID:	53887
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47085, Chlordane **Region 3**

Carmel River

LOE ID:	53888
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47099 Region 3

Carmel River

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 61 samples exceed the site specific water quality objective however; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and the results are as follows: In LOEs 78430 and 49702 one of the three annual means did exceed the site specific water quality objective and in LOEs 78432 and 49703 the single annual mean did not exceed the site specific water quality objective. In summary, 1 of the 4 annual means calculated for these data exceed the site specific water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 annual means calculated for the samples exceeded the site specific water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47099, Chloride Region 3

Carmel River

LOE ID:	53891
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Chapter III, Section II. Table 3-7 specifies the Chloride objective for the Carmel River as 20 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47099, Chloride **Region 3**

Carmel River

LOE ID:	53889
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Chapter III, Section II. Table 3-7 specifies the Chloride objective for the Carmel River as 20 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47099, Chloride **Region 3**

Carmel River

LOE ID:	53892
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47099, Chloride **Region 3**

Carmel River

LOE ID:	78433
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47099, Chloride **Region 3**

Carmel River

LOE ID:	78430
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 8 of 25 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47099, Chloride **Region 3**

Carmel River

LOE ID:	78431
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47099, Chloride **Region 3**

Carmel River

LOE ID:	78432
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 4 of 35 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47099, Chloride **Region 3**

Carmel River

LOE ID:	49703
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 4 of 35 samples exceed the

	criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47099, Chloride **Region 3**

Carmel River

LOE ID:	49702
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 8 of 25 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 42634 Region 3

Carmel River

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 131 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 131 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42634, Chlorophyll-a Region 3

Carmel River

LOE ID:	49892
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42634, Chlorophyll-a **Region 3**

Carmel River

LOE ID:	49893
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42634, Chlorophyll-a **Region 3**

Carmel River

LOE ID:	49712
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42634, Chlorophyll-a **Region 3**

Carmel River

LOE ID:	49713
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42634, Chlorophyll-a **Region 3**

Carmel River

LOE ID:	9416
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42634, Chlorophyll-a **Region 3**

Carmel River

LOE ID:	9424
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 5/31/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42634, Chlorophyll-a **Region 3**

Carmel River

LOE ID:	9415
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42634, Chlorophyll-a **Region 3**

Carmel River

LOE ID:	9423

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 5/31/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42645** **Region 3**

Carmel River

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Six lines of evidence are available in the administrative record to assess this pollutant. Zero of zero samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). This decision will not use the single water sample collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and none of the water sample exceeded the municipal and domestic supply objective. The single sediment sample (pore water) exceeded the aquatic life water quality objective however this sample will not be included in the exceedance count because the criteria used are specific to water samples, not sediment pore water. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42645, Chlorpyrifos **Region 3**

Carmel River

LOE ID:	16231
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42645, Chlorpyrifos **Region 3**

Carmel River

LOE ID:	16214
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42645, Chlorpyrifos **Region 3**

Carmel River

LOE ID:	16218
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42645, Chlorpyrifos **Region 3**

Carmel River

LOE ID:	16213
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]

Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42645, Chlorpyrifos **Region 3**

Carmel River

LOE ID:	53899
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42645, Chlorpyrifos **Region 3**

Carmel River

LOE ID:	53900
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37363** **Region 3**

Carmel River

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Zero of the 4 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the

use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37363, Chromium **Region 3**

Carmel River

LOE ID:	53901
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37363, Chromium **Region 3**

Carmel River

LOE ID:	53902
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37363, Chromium **Region 3**

Carmel River

LOE ID:	16070
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37363, Chromium **Region 3**

Carmel River

LOE ID:	15960
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37363, Chromium **Region 3**

Carmel River

LOE ID:	15947
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37363, Chromium **Region 3**

Carmel River

LOE ID:	16069
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37591** **Region 3**

Carmel River

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Zero of the 4 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37591, Copper **Region 3**

Carmel River

LOE ID:	16033
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]

Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37591, Copper **Region 3**

Carmel River

LOE ID:	15863
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37591, Copper **Region 3**

Carmel River

LOE ID:	15876
Pollutant:	Copper

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37591, Copper **Region 3**

Carmel River

LOE ID:	16034
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37591, Copper **Region 3**

Carmel River

LOE ID:	53903
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37591, Copper **Region 3**

Carmel River

LOE ID:	53910
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47087** **Region 3**

Carmel River

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the

Conclusion:	Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47087, Cyfluthrin **Region 3**

Carmel River

LOE ID:	53911
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g

	and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47087, Cyfluthrin **Region 3**

Carmel River

LOE ID:	53912
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47088 Region 3

Carmel River

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47088, Cyhalothrin, Lambda — Region 3

Carmel River

LOE ID:	53913
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47088, Cyhalothrin, Lambda **Region 3**

Carmel River

LOE ID:	53919
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from

Guideline Reference:	Amweg et al. (2005). Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47089 Region 3

Carmel River

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Maund et al., 2002) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47089, Cypermethrin Region 3

Carmel River

LOE ID:	53920

Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47089, Cypermethrin **Region 3**

Carmel River

LOE ID:	53921
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47094**	**Region 3**
Carmel River		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47094, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Carmel River

LOE ID:	53928
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47094, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Carmel River

LOE ID:	53922
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47095**	**Region 3**
Carmel River		

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d)

List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47095, DDE (Dichlorodiphenyldichloroethylene) Region 3

Carmel River

LOE ID:	53930
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47095, DDE (Dichlorodiphenyldichloroethylene) Region 3

Carmel River

LOE ID:	53929
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47096** **Region 3**

Carmel River

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Four lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect

aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47096, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Carmel River

LOE ID:	53931
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47096, DDT (Dichlorodiphenyltrichloroethane) Region 3

Carmel River

LOE ID:	53867
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47096, DDT (Dichlorodiphenyltrichloroethane) Region 3

Carmel River

LOE ID:	53932
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47096, DDT (Dichlorodiphenyltrichloroethane) Region 3

Carmel River

LOE ID:	53873
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47090** **Region 3**

Carmel River

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47090, Deltamethrin **Region 3**

Carmel River

LOE ID:	53933
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47090, Deltamethrin **Region 3**

Carmel River

LOE ID:	53934
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42471**	**Region 3**
Carmel River		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011).This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guideline (Finlayson, 2004). The exceedance count does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42471, Diazinon **Region 3**

Carmel River

LOE ID:	53936
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42471, Diazinon **Region 3**

Carmel River

LOE ID:	53935
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42471, Diazinon **Region 3**

Carmel River

LOE ID:	16640
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001)

	data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42471, Diazinon **Region 3**

Carmel River

LOE ID:	16863
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42471, Diazinon **Region 3**

Carmel River

LOE ID:	16862
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42471, Diazinon **Region 3**

Carmel River

LOE ID:	16639
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41867	Region 3
Carmel River		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Zero of the 3 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41867, Dieldrin	**Region 3**
Carmel River	

LOE ID:	16708
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41867, Dieldrin **Region 3**

Carmel River

LOE ID:	16793
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41867, Dieldrin **Region 3**

Carmel River

LOE ID:	16792
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41867, Dieldrin **Region 3**

Carmel River

LOE ID:	16709
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41867, Dieldrin **Region 3**

Carmel River

LOE ID:	53938
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41867, Dieldrin **Region 3**

Carmel River

LOE ID:	53937
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 41858 Region 3

Carmel River

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Zero of the 3 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 3 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41858, Endrin Region 3

Carmel River

LOE ID:	53940
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41858, Endrin **Region 3**

Carmel River

LOE ID:	53939
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41858, Endrin **Region 3**

Carmel River

LOE ID:	16560
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41858, Endrin **Region 3**

Carmel River

LOE ID:	16559
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41858, Endrin **Region 3**

Carmel River

LOE ID:	16402
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41858, Endrin **Region 3**

Carmel River

LOE ID:	16401
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37776 Region 3
Carmel River

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Eight of the 167 samples exceed the USEPA Ambient Water Quality Criteria for E. coli. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 167 samples exceed the USEPA Ambient Water Quality Criteria for E. coli and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37776, Escherichia coli (E. coli) Region 3
Carmel River

LOE ID:	14032
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Carmel River to determine beneficial use support and results are as follows: 2 of 61 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 2 monitoring sites [307CML_CCL - Carmel River Hwy 1, 307GAR_CCL - Carmel River Garland Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/1/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37776, Escherichia coli (E. coli) **Region 3**

Carmel River

LOE ID:	11040
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/11/2005-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37776, Escherichia coli (E. coli) **Region 3**

Carmel River

LOE ID:	11056
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/11/2005-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37776, Escherichia coli (E. coli) **Region 3**

Carmel River

LOE ID:	14033
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Carmel River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 2 monitoring sites [307CML_CCL - Carmel River Hwy 1, 307GAR_CCL - Carmel River Garland Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/1/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37776, Escherichia coli (E. coli) **Region 3**

Carmel River

LOE ID:	18346
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-36 - Carmel River at Schulte Road, 307-CARME-39 - Carmel River Mouth, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37776, Escherichia coli (E. coli) Region 3

Carmel River

LOE ID:	18332
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 3 of 27 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-36 - Carmel River at Schulte Road, 307-CARME-39 - Carmel River Mouth, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel

	River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37776, Escherichia coli (E. coli) **Region 3**

Carmel River

LOE ID:	49694
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 2 of 28 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37776, Escherichia coli (E. coli) **Region 3**

Carmel River

LOE ID:	49695
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	34
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 34 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47091**	**Region 3**
Carmel River		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47091, Esfenvalerate/Fenvalerate **Region 3**

Carmel River

LOE ID:	53941
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47091, Esfenvalerate/Fenvalerate **Region 3**

Carmel River

LOE ID:	53942
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37833** **Region 3**

Carmel River

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. One of the 134 samples exceeded the water quality objective for non-contact recreation and 6 of the 134 samples exceeded the water quality objective for contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 134 samples exceeded the water quality objective for non-contact recreation and 6 of the 134 samples exceeded the water quality objective for contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37833, Fecal Coliform **Region 3**

Carmel River

LOE ID:	49692
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37833, Fecal Coliform **Region 3**

Carmel River

LOE ID:	49693
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37833, Fecal Coliform **Region 3**

Carmel River

LOE ID:	49699
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37833, Fecal Coliform **Region 3**

Carmel River

LOE ID:	49698
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37833, Fecal Coliform **Region 3**

Carmel River

LOE ID:	11279
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]

Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37833, Fecal Coliform **Region 3**

Carmel River

LOE ID:	11018
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37833, Fecal Coliform **Region 3**

Carmel River

LOE ID:	11017

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 2 of 31 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37833, Fecal Coliform **Region 3**

Carmel River

LOE ID:	11280
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47092**	**Region 3**
Carmel River		

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Ding et al., 2011) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47092, Fenpropathrin **Region 3**

Carmel River

LOE ID:	53943
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47092, Fenpropathrin **Region 3**

Carmel River

LOE ID:	53831

Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **64348** **Region 3**

Carmel River

Pollutant:	**Flow alterations**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollution
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.11 of the Listing Policy. Under this section when all other listing factors do not result in the listing of a water segment but information indicates non-attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that water quality standard is not attained. If the weight of evidence indicates non-attainment, the water segment shall be placed on the CWA section 303(d) List. Four LOEs summarize benthic invertebrate community health scores. Using two different scoring

approaches, there is evidence that the benthic invertebrate community are negatively impacted in this watershed but there is no pollutants associated with these impacts. However, there is evidence of pollution caused by flow alteration in the watershed and this could also explain the condition of the benthic invertebrate community.

One LOE references a document provided by the California Channelkeeper Alliance that cites a report by Fisheries Biologist Patrick Higgins for the Carmel River. That report cited summarizes various flow levels needed for migration and spawning of steelhead in the Carmel River and describes how flow alterations and the construction of two dams in the watershed have significantly impacted these uses.

Under Section 3.11 of the Listing Policy, the data and information must provide a substantial basis to reasonably infer that the water quality standard is not attained and the approach used must be scientifically defensible.

Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification for placing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. Although there is evidence of flow alteration and negative impacts to the benthic invertebrate community, there is not, at this time, data and information available in the Administrative Record that meets the requirement of Section 3.11 of the Listing Policy.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 64348, Flow alterations **Region 3**

Carmel River

LOE ID:	53870
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The one sample collected had an IBI score below 40. The IBI score for this site was 27.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. RG 3 BP
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores below 40 are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13

Spatial Representation:	The sample was collected from Carmel River.
Temporal Representation:	The sample was collected in June 2008.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Perennial Streams Assessment 2008 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 64348, Flow alterations **Region 3**

Carmel River

LOE ID:	53872
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	One of the 3 IBI scores in this water body was 39 or lower and therefore was below the impairment threshold of the Southern California IBI.
Data Reference:	Santa Lucia Watershed Rotation 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following stations: 307CMNxxx-Carmel River @ Nason Rd Community Park 307CMUxxx-Carmel River at Esquiline Road
Temporal Representation:	Surveys done on Sept. 3, 2009; July 29, 2010; and June 16, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program (Santa Lucia Rotation).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 64348, Flow alterations **Region 3**

Carmel River

LOE ID:	95729
Pollutant:	Flow alterations
LOE Subgroup:	Pollution
Matrix:	-N/A
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Surveys of fish and game biologists/other professionals
Data Used to Assess Water Quality:	As documented in a white paper prepared for the Carmel River Steelhead Association, significantly reduced flows in the Carmel River and its tributaries, particularly San Clemente Creek, are placing serious stress on native steelhead populations. This white paper, which includes a comprehensive bibliography of information, should be considered along with DFG data in assessing the Carmel River and San Clemente Creek for listing as impaired by water diversions/flow alterations.
Data Reference:	Comments and data regarding several waterbodies impaired by flow and require listings for low flows.
SWAMP Data:	
Water Quality Objective/Criterion:	Clean Water Act Section 101, which sets the national objective of restoring and maintaining the Â“chemical, physical, and biological integrity of the NationÂ's waters.Â”
Objective/Criterion Reference:	Guidance for 2006 assessment, listing and reporting requirements pursuant to sections 303(d), 305(b) and 314 of the Clean Water Act. July 29, 2005
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Information compiled from several data sources watershed wide.
Temporal Representation:	Information compiled from several data sources including historical and current records.
Environmental Conditions:	
QAPP Information:	NA
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 64348, Flow alterations **Region 3**

Carmel River

LOE ID:	79151
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	Three of the four IBI scores are 39 or below and therefore are below the impairment threshold of the Southern California IBI. In 2005 and 2007, a methods comparison study was conducted in this water body resulting in sample events where more than one sample was collected at a station and more than one IBI score was reported. These samples are not spatially or temporally independent as defined in the Listing Policy. For the purposes of this assessment, staff will use the IBI score from the sample that was collected following the SWAMP Reach Wide Benthos method, or RWB. The IBI score for the RWB sample in 2005 was 11, in 2007 the RWB IBI score was 29, in 2009 the RWB IBI score was 26 and in 2010 the RWB IBI score was 44.
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The IBI is a multi-metric assessment that employs biological metrics that respond to a habitat or water quality impairment. Each of the biological metrics measured at a site are converted to an IBI score then summed. These cumulative scores are then ranked. For the Southern California IBI, sites with scores of 39 or less are considered to have impaired conditions.
Guideline Reference:	A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams. Environmental Management. Volume 35, number 1 (2005): pp. 1-13
Spatial Representation:	Surveys done at the following station: 307CMLxxx-Carmel River at Highway 1
Temporal Representation:	Surveys done on May 3, 2005; April 11, 2007; April 11, 2007; May 5, 2009; June 29, 2010.
Environmental Conditions:	
QAPP Information:	Data were collected following SWAMP QA Protocols for the Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 64348, Flow alterations **Region 3**

Carmel River

LOE ID:	79150
Pollutant:	Benthic-Macroinvertebrate Bioassessments
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Benthic macroinvertebrate surveys
Data Used to Assess Water Quality:	The CSCI scores for this site are 0.435677850796369, 0.623591380220983, 0.523171463962085, and 0.722928573716223. All four of the samples score below the 0.79 threshold, and are therefore exceeding the water quality objective for the aquatic life beneficial use.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. RG 3 BP
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The California Stream Condition Index (CSCI) is a biological scoring tool that helps aquatic resource managers translate complex data about benthic macroinvertebrates found living in a stream into an overall measure of stream health. The CSCI score is calculated by comparing the expected condition with actual (observed) results (Rhen, A.C. et al., 2015). CSCI scores range from 0 (highly degraded) to greater than 1 (equivalent to reference). CSCI scoring of biological condition are as follows: greater than or equal to 0.92 = likely intact condition, 0.91 to 0.80 = possibly altered condition, 0.79 to 0.63 = likely altered condition, less than or equal to 0.62 = very likely altered condition. Sites with scores below 0.79 are considered to have exceeded the water quality objective for aquatic life beneficial use support.
Guideline Reference:	The California Stream Condition Index (CSCI): A New Statewide Biological Scoring Tool for Assessing the Health of Freshwater Streams.

Spatial Representation:	The samples were collected from station 307CMLxxx.
Temporal Representation:	The samples were collected on the following dates: May 3 2005, Apr 11 2007, May 5 2009, and Jun 29 2010.
Environmental Conditions:	
QAPP Information:	Samples were collected for the Statewide Perennial Streams Assessment 2008 following SWAMP protocols and stored in the SWAMP database.
QAPP Information Reference(s):	

DECISION ID 37421 Region 3

Carmel River

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Zero of the 4 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37421, Lead Region 3

Carmel River

LOE ID:	17198
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37421, Lead **Region 3**

Carmel River

LOE ID:	17357
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37421, Lead **Region 3**

Carmel River

LOE ID:	17356
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37421, Lead **Region 3**

Carmel River

LOE ID:	17199
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37421, Lead **Region 3**

Carmel River

LOE ID:	53832
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37421, Lead **Region 3**

Carmel River

LOE ID:	53833
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47093** **Region 3**

Carmel River

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47093, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Carmel River

LOE ID:	53834
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47093, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Carmel River

LOE ID:	53835
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37466**	**Region 3**
Carmel River		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Zero of the 4 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37466, Mercury — Region 3

Carmel River

LOE ID:	53837
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37466, Mercury — Region 3

Carmel River

LOE ID:	53836
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37466, Mercury **Region 3**

Carmel River

LOE ID:	17283
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37466, Mercury **Region 3**

Carmel River

LOE ID:	17202
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37466, Mercury **Region 3**

Carmel River

LOE ID:	17189
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37466, Mercury **Region 3**

Carmel River

LOE ID:	17284
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**47097**	**Region 3**
Carmel River		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Ding et al., 2011) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47097, Methyl Parathion **Region 3**

Carmel River

LOE ID:	53839
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47097, Methyl Parathion **Region 3**

Carmel River

LOE ID:	53838

Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38228** **Region 3**

Carmel River

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Zero of the 4 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A

minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38228, Nickel **Region 3**

Carmel River

LOE ID:	16553
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38228, Nickel **Region 3**

Carmel River

LOE ID:	17090
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38228, Nickel **Region 3**

Carmel River

LOE ID:	17091
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38228, Nickel **Region 3**

Carmel River

LOE ID:	16554
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38228, Nickel **Region 3**

Carmel River

LOE ID:	53840
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 38228, Nickel **Region 3**

Carmel River

LOE ID:	53841
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38229** **Region 3**

Carmel River

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty-six lines of evidence are available in the administrative record to assess this pollutant. Zero of

the 221 nitrate samples exceed the water quality objectives for Agricultural Supply and Drinking Water. Zero of the 61 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 62 nitrate/nitrite samples exceed the water quality objectives for Agricultural Supply and Drinking Water. Zero of the 61 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	53843
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.

QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	53842
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49714
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49715
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites,

	monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49716
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49717
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49856
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49857
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49688
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49855
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate — Region 3

Carmel River

LOE ID:	49687
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate — Region 3

Carmel River

LOE ID:	49686
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to

	determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49854
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]

Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49689
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	9421
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	9422
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	13938
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Carmel River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carmel River was collected at 2 monitoring sites [307CML_CCL - Carmel River Hwy 1, 307GAR_CCL - Carmel River Garland Park]
Temporal Representation: Data was collected over the time period 1/22/2002-6/1/2005.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: EPA Approved QAPP.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID: 9414

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 40
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference: Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A
Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation: Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	9413
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	18469
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-36 - Carmel River at Schulte Road, 307-CARME-39 - Carmel River Mouth, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	18468
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-36 - Carmel River at Schulte Road, 307-CARME-39 - Carmel River Mouth, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	13937
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Carmel River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 2 monitoring sites [307CML_CCL - Carmel River Hwy 1, 307GAR_CCL - Carmel River Garland Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/1/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49910
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49909
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49908
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38229, Nitrate **Region 3**

Carmel River

LOE ID:	49911
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47101**	**Region 3**
Carmel River		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 62 samples exceed the water quality objectives for agriculture or drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 62 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47101, Nitrogen, Nitrite — Region 3

Carmel River

LOE ID:	49872
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47101, Nitrogen, Nitrite — Region 3

Carmel River

LOE ID:	49873
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47101, Nitrogen, Nitrite **Region 3**

Carmel River

LOE ID:	78440
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	26
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47101, Nitrogen, Nitrite **Region 3**

Carmel River

LOE ID:	78439
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47101, Nitrogen, Nitrite **Region 3**

Carmel River

LOE ID:	53844

Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47101, Nitrogen, Nitrite **Region 3**

Carmel River

LOE ID:	53845
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 38121 Region 3

Carmel River

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Ten of 170 exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and one of the 170 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats and the dissolved oxygen levels are supporting those beneficial uses. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 170 exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, one of the 170 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved Region 3

Carmel River

LOE ID:	53848
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	53847
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	49931
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	49930
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	49929
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	49928
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	49720
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	49721
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-

	Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	49718
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	49719
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	17978
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-39 - Carmel River Mouth, 307-CARME-36 - Carmel River at Schulte Road, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	17977
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-39 - Carmel River Mouth, 307-CARME-36 - Carmel River at Schulte Road, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12824
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12822
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12823
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12859
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12879
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carmel River to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CML-Carmel River at Highway 1, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12880
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carmel River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CML-Carmel River at Highway 1, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12857
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 1 of 32 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12858
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12894
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carmel River to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CML-Carmel River at Highway 1, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12895
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carmel River to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CML-Carmel River at Highway 1, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12843
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38121, Oxygen, Dissolved **Region 3**

Carmel River

LOE ID:	12808
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 47100 Region 3
Carmel River

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Two lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47100, PCBs (Polychlorinated biphenyls) Region 3
Carmel River

LOE ID:	78434
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 307CMLxxx (307CML-Carmel River at Highway 1).
Temporal Representation:	The samples were collected on 6/17/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47100, PCBs (Polychlorinated biphenyls) Region 3

Carmel River

LOE ID:	53849
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 307CMLxxx (307CML-Carmel River at Highway 1).
Temporal Representation:	The samples were collected on 6/17/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47098	Region 3
Carmel River		

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Amweg et al., 2005) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47098, Permethrin, total	**Region 3**
Carmel River	

LOE ID:	53850
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47098, Permethrin, total **Region 3**

Carmel River

LOE ID:	53851
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9

	ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	47102	Region 3
Carmel River		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 60 samples exceed the site specific water quality objective however; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and the results are as follows: In LOEs 78436 and 49706 two of the three annual means did exceed the site specific water quality objective and in LOEs 78435 and 49707 the single annual mean did not exceed the site specific water quality objective. In summary, 2 of the 4 annual means calculated for these data exceed the site specific water quality objective. This sample size (as annual means) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 4 annual means calculated for the samples exceeded the site specific water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47102, Sodium **Region 3**

Carmel River

LOE ID:	78435
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 6 of 35 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47102, Sodium **Region 3**

Carmel River

LOE ID:	78436
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 9 of 25 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47102, Sodium **Region 3**

Carmel River

LOE ID:	49706
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 9 of 25 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 47102, Sodium **Region 3**

Carmel River

LOE ID:	49707
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 6 of 35 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 20 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37879** **Region 3**

Carmel River

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 167 samples exceed the wate quality objective for Agricultural Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 167 samples exceed the wate quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37879, Specific Conductivity **Region 3**

Carmel River

LOE ID:	53864
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37879, Specific Conductivity **Region 3**

Carmel River

LOE ID:	49838
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37879, Specific Conductivity **Region 3**

Carmel River

LOE ID:	49839
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37879, Specific Conductivity **Region 3**

Carmel River

LOE ID:	17627
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-36 - Carmel River at Schulte Road, 307-CARME-39 - Carmel River Mouth, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37879, Specific Conductivity **Region 3**

Carmel River

LOE ID:	13866
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Hwy 1]
Temporal Representation:	Data was collected on a single day 12/3/2001.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37879, Specific Conductivity **Region 3**

Carmel River

LOE ID:	11281
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37879, Specific Conductivity **Region 3**

Carmel River

LOE ID:	12878
Pollutant:	Electrical Conductivity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 8/23/2006-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37879, Specific Conductivity **Region 3**

Carmel River

LOE ID:	11019
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37920**	**Region 3**
Carmel River		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Six LOEs summarize 164 grab samples and 4 of these samples exceeds the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective. LOE 12896 summarizes 6 - 24 hour events of continuous temperature measurements and two of those exceeded the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective. In summary, 6 of 170 samples exceeded the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 170 samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37920, Temperature, water **Region 3**

Carmel River

LOE ID:	12877
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37920, Temperature, water **Region 3**

Carmel River

LOE ID:	12896
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Carmel River to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CML-Carmel River at Highway 1, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/24/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37920, Temperature, water **Region 3**

Carmel River

LOE ID:	18652
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-36 - Carmel River at Schulte Road, 307-CARME-39 - Carmel River Mouth, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37920, Temperature, water **Region 3**

Carmel River

LOE ID:	12842
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37920, Temperature, water **Region 3**

Carmel River

LOE ID:	53866
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37920, Temperature, water **Region 3**

Carmel River

LOE ID:	49952
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37920, Temperature, water **Region 3**

Carmel River

LOE ID:	49953
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47104**	**Region 3**
Carmel River		

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty-three of the 60 samples exceed the site specific water quality objective however; this objective is set for the annual mean, not the single sample maximum. Annual means were calculated for the data associated with each LOE and the results are as follows: In LOEs 78437 and 49704 all three annual means did exceed the site specific water quality objective and in LOEs 78438 and 49705 the single annual mean did not exceed the site specific water quality objective. In summary, 3 of the 4 annual means calculated for these data exceed the site specific water quality objective. This sample size (as annual means) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 4 annual means calculated for the samples exceeded the site specific water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47104, Total Dissolved Solids **Region 3**

Carmel River

LOE ID:	49704
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 12 of 25 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 200 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47104, Total Dissolved Solids **Region 3**

Carmel River

LOE ID:	49705
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 11 of 35 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 200 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47104, Total Dissolved Solids **Region 3**

Carmel River

LOE ID:	78437
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 12 of 25 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 200 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47104, Total Dissolved Solids **Region 3**

Carmel River

LOE ID:	78438
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 11 of 35 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. The Waterbody Specific Objective is 200 mg/L
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMU-Carmel River at Esquiline Road, 307CMN-Carmel River at Nason Road, Community Park]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41843** **Region 3**

Carmel River

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Four LOEs summarizes sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sediment sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in sediment samples. Zero of the two sediment samples resulted in a significant toxic effect to one or more test organisms. Five LOEs summarize water samples. One water sample is summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and one additional water sample is summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in water samples. Zero of the two water samples resulted in a significant toxic effect to one or more test organisms. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 water samples and zero of the two sediment samples resulted in a significant toxic effect to one or more test organisms and therefore zero of the samples exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41843, Toxicity **Region 3**

Carmel River

LOE ID:	78946
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample

	id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 307CMLxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41843, Toxicity **Region 3**

Carmel River

LOE ID:	53875
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.

Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 307CMLxxx.
Temporal Representation:	The samples were collected in June 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41843, Toxicity **Region 3**

Carmel River

LOE ID:	53874
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample did not result in any significant toxicity. The toxicity tests included total cell count of Selenastrum capricornutum, survival and growth of Ceriodaphnia dubia, and survival and biomass of Pimephales promelas. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Coastal Confluences 2008 2009
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data, exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The samples were collected at station 307CML- Carmel River at Highway 1.
Temporal Representation:	The samples were collected in March 2009.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41843, Toxicity **Region 3**

Carmel River

LOE ID:	23751
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41843, Toxicity **Region 3**

Carmel River

LOE ID:	23738
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41843, Toxicity **Region 3**

Carmel River

LOE ID:	23756
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1

samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference: Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference: Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation: Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]

Temporal Representation: Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41843, Toxicity **Region 3**

Carmel River

LOE ID: 23755

Pollutant: Invertebrate Toxicity

LOE Subgroup: Toxicity

Matrix: Sediment

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 1

Number of Exceedances: 0

Data and Information Type: TOXICITY TESTING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference: Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data: SWAMP

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41843, Toxicity **Region 3**

Carmel River

LOE ID:	23752
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and

	test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41843, Toxicity **Region 3**

Carmel River

LOE ID:	23739
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/20/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42641 Region 3

Carmel River

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. [NUMBER] lines of evidence are available in the administrative record to assess this pollutant. Four of the 129 samples exceed the evaluation guideline (Sigler et al., 1984) set to protect cold water fish haibtat and 2 of the 129 samples exceed the evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) set to protect warm water fish haibtat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 129 samples exceed the evaluation guideline (Sigler et al., 1984) set to protect cold water fish haibtat and 2 of the 129 samples exceed the evaluation guideline (Shoup, D.E. and Wahl D.H., 2009) set to protect warm water fish haibtat. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42641, Turbidity Region 3

Carmel River

LOE ID:	49724
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42641, Turbidity **Region 3**

Carmel River

LOE ID:	49725
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]

Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42641, Turbidity **Region 3**

Carmel River

LOE ID:	12876
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42641, Turbidity **Region 3**

Carmel River

LOE ID:	12840

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42641, Turbidity **Region 3**

Carmel River

LOE ID:	12841
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Carmel River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42641, Turbidity **Region 3**

Carmel River

LOE ID:	12861
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42641, Turbidity **Region 3**

Carmel River

LOE ID:	49950
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42641, Turbidity **Region 3**

Carmel River

LOE ID:	49951
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 2 of 35 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37238**	**Region 3**
Carmel River		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Zero of the 4 samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine,

with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37238, Zinc **Region 3**

Carmel River

LOE ID:	53876
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37238, Zinc **Region 3**

Carmel River

LOE ID:	53877
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River at Highway 1 - 307CMLxxx]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37238, Zinc **Region 3**

Carmel River

LOE ID:	17951
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37238, Zinc **Region 3**

Carmel River

LOE ID:	17682
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37238, Zinc **Region 3**

Carmel River

LOE ID:	17772
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37238, Zinc **Region 3**

Carmel River

LOE ID:	17773
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38112** **Region 3**

Carmel River

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Thirty-six lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Four of the 163 samples exceed the water quality objective for Agricultural Supply, 7 of the 163 samples exceed the water quality objectives for Drinking Water and Recreation and 8 of the 163 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 163 samples exceed the water quality objective for Agricultural Supply, 7 of the 163 samples exceed the water quality objectives for Drinking Water and Recreation and 8 of the 163 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	19176
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-39 - Carmel River Mouth, 307-CARME-36 - Carmel River at Schulte Road, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel

	River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	19177
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-39 - Carmel River Mouth, 307-CARME-36 - Carmel River at Schulte Road, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49722
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 2 of 28 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49723
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	10998
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	10999
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 4 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	11000
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 4 of 40

	samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	11001
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	11020
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	11021
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 3 of 31 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	10997
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	11036
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	11037
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	11038

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	11039
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Carmel River to determine beneficial use support and results are as follows: 3 of 31 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/2001-8/23/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	19175
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 2 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-39 - Carmel River Mouth, 307-CARME-36 - Carmel River at Schulte Road, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's

	Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	19174
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-39 - Carmel River Mouth, 307-CARME-36 - Carmel River at Schulte Road, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	11282
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Carmel River to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	18867
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	28
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-39 - Carmel River Mouth, 307-CARME-36 - Carmel River at Schulte Road, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	18868
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carmel River to determine beneficial use support and results are as follows: 2 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 8 monitoring sites [307-CARME-39 - Carmel River Mouth, 307-CARME-36 - Carmel River at Schulte Road, 307-CARME-37 - Carmel River at Hacienda Carmel, 307-CARME-33 - Carmel River at Rosie's Bridge, 307-CARME-310 - Carmel River at the end of Rio Road, 307-CARME-38 - Carmel River at Hwy 1, 307-CARME-35 - Carmel River at Garland Park, 307-GARZA-31 - Carmel River at Garzas Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	53857
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	53856

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	53852
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	53855
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	53854
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	53853
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [Carmel River - 307PS0028]
Temporal Representation:	Data was collected on a single day 6/3/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49933
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	35

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49690
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49875
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	35
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 0 of 35 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49697

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49696
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49700
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49874

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49932
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 2 of 28 samples exceed the criterion for pH.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML-Carmel River at Highway 1]
Temporal Representation:	Data was collected over the time period 1/17/2007-6/8/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49691
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 38112, pH **Region 3**

Carmel River

LOE ID:	49701
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	35
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carmel River to determine beneficial use support and results are as follows: 1 of 35 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 3 monitoring sites [307CMD-Carmel River at Schulte Road, 307CMN-Carmel River at Nason Road, Community Park, 307CMU-Carmel River at Esquiline Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41838** **Region 3**

Carmel River

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41838, Anthracene **Region 3**

Carmel River

LOE ID:	15814
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41838, Anthracene **Region 3**

Carmel River

LOE ID:	15815
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41838, Anthracene **Region 3**

Carmel River

LOE ID:	15637
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41838, Anthracene **Region 3**

Carmel River

LOE ID:	15638
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42630**	**Region 3**
Carmel River		

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42630, Benzo(a)anthracene — Region 3

Carmel River

LOE ID:	15693
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42630, Benzo(a)anthracene — Region 3

Carmel River

LOE ID:	15777
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42630, Benzo(a)anthracene **Region 3**

Carmel River

LOE ID:	15694
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42630, Benzo(a)anthracene **Region 3**

Carmel River

LOE ID:	15776
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41891	Region 3
Carmel River		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41891, Benzo(a)pyrene (3,4-Benzopyrene -7-d)	**Region 3**
Carmel River	

LOE ID:	15562
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41891, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Carmel River

LOE ID:	15405
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41891, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Carmel River

LOE ID:	15575
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41891, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Carmel River

LOE ID:	15404
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41855**	**Region 3**
Carmel River		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41855, Chrysene (C1-C4) **Region 3**

Carmel River

LOE ID:	15950
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41855, Chrysene (C1-C4) Region 3

Carmel River

LOE ID:	16045
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41855, Chrysene (C1-C4) Region 3

Carmel River

LOE ID:	16044
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41855, Chrysene (C1-C4) **Region 3**

Carmel River

LOE ID:	15951
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37779 Region 3

Carmel River

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seven of 61 samples exceed the Water Contact Recreation Evaluation Guideline for Enterococcus. However, none of the 61 samples exceed the water quality objectives for Non-Contact and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 61 samples exceed the water quality objectives for Non-Contact and 7 of 61 samples exceed the Water Contact Recreation Evaluation Guideline. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37779, Enterococcus Region 3

Carmel River

LOE ID:	14172
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Carmel River to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 2 monitoring sites [307CML_CCL - Carmel River Hwy 1, 307GAR_CCL - Carmel River Garland Park]
Temporal Representation:	Data was collected over the time period 1/22/2002-6/1/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37779, Enterococcus **Region 3**

Carmel River

LOE ID:	14171
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Carmel River to determine beneficial use support and results are as follows: 7 of 61 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 2 monitoring sites [307CML_CCL - Carmel River Hwy 1, 307GAR_CCL - Carmel River Garland Park].
Temporal Representation:	Data was collected monthly over the time period 1/22/2002-6/1/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID 41870 Region 3

Carmel River

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41870, Fluoranthene Region 3

Carmel River

LOE ID:	16407
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41870, Fluoranthene **Region 3**

Carmel River

LOE ID:	16486
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41870, Fluoranthene **Region 3**

Carmel River

LOE ID:	16487
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41870, Fluoranthene **Region 3**

Carmel River

LOE ID:	16406
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41910** **Region 3**

Carmel River

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41910, Fluorene **Region 3**

Carmel River

LOE ID:	16476
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41910, Fluorene **Region 3**

Carmel River

LOE ID:	16475
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41910, Fluorene **Region 3**

Carmel River

LOE ID:	16603
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41910, Fluorene **Region 3**

Carmel River

LOE ID:	16604
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001)

	data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41922**	**Region 3**
Carmel River		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41922, Naphthalene **Region 3**

Carmel River

LOE ID:	17255
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41922, Naphthalene **Region 3**

Carmel River

LOE ID:	17350
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41922, Naphthalene **Region 3**

Carmel River

LOE ID:	17337
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41922, Naphthalene **Region 3**

Carmel River

LOE ID:	17256
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41960 **Region 3**

Carmel River

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41960, Phenanthrene **Region 3**

Carmel River

LOE ID:	16923
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41960, Phenanthrene **Region 3**

Carmel River

LOE ID:	17005
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41960, Phenanthrene **Region 3**

Carmel River

LOE ID:	17018
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41960, Phenanthrene **Region 3**

Carmel River

LOE ID:	16922
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42631**	**Region 3**
Carmel River		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42631, Pyrene **Region 3**

Carmel River

LOE ID:	16882
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42631, Pyrene **Region 3**

Carmel River

LOE ID:	16881
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (00SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/29/2002. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42631, Pyrene **Region 3**

Carmel River

LOE ID:	17055
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42631, Pyrene **Region 3**

Carmel River

LOE ID:	17056
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Carmel River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Carmel River was collected at 1 monitoring site [307CML001 - Carmel River at HWY 1]
Temporal Representation:	Data was collected on a single day 3/30/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Tularcitos Creek**
Water Body ID: **CAR3070003220020124151854**
Water Body Type: **River & Stream**

DECISION ID **36816** **Region 3**
Tularcitos Creek

Pollutant: **Chloride**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 19 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nineteen of the 19 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36816, Chloride **Region 3**
Tularcitos Creek

LOE ID: 9427

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-7/25/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36816, Chloride **Region 3**

Tularcitos Creek

LOE ID:	52460
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Chloride.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36982** **Region 3**

Tularcitos Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Nineteen of the 19 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of the 19 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36982, Sodium **Region 3**

Tularcitos Creek

LOE ID:	52489
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Sodium.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36982, Sodium **Region 3**

Tularcitos Creek

LOE ID:	9430
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for

	Tularcitos Creek to determine beneficial use support and results are as follows: 8 of 8 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-7/25/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39447**	**Region 3**
Tularcitos Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Four LOEs summarize unionized ammonia data in which zero of the 20 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 23 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 20 samples exceed the water quality objective for unionized ammonia and zero of the 23 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39447, Ammonia **Region 3**

Tularcitos Creek

LOE ID:	9432
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 2/5/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39447, Ammonia **Region 3**

Tularcitos Creek

LOE ID:	9431
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 2/5/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39447, Ammonia **Region 3**

Tularcitos Creek

LOE ID:	9425
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Total.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39447, Ammonia **Region 3**

Tularcitos Creek

LOE ID:	52692
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [

	307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39447, Ammonia **Region 3**

Tularcitos Creek

LOE ID:	52490
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 2/5/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39447, Ammonia **Region 3**

Tularcitos Creek

LOE ID:	52732
Pollutant:	Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 2/5/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36796**	**Region 3**
Tularcitos Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 18 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 18 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36796, Boron **Region 3**

Tularcitos Creek

LOE ID:	52459
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Boron, dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36796, Boron **Region 3**

Tularcitos Creek

LOE ID:	9426
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-7/25/2002. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39448** **Region 3**

Tularcitos Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 22 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 22 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39448, Chlorophyll-a **Region 3**

Tularcitos Creek

LOE ID:	9433
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39448, Chlorophyll-a **Region 3**

Tularcitos Creek

LOE ID:	9434
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39448, Chlorophyll-a **Region 3**

Tularcitos Creek

LOE ID:	52491
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39448, Chlorophyll-a **Region 3**

Tularcitos Creek

LOE ID:	52733
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	50138	Region 3
Tularcitos Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for water contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. One of 11 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 11 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 50138, Escherichia coli (E. coli)	**Region 3**
Tularcitos Creek	

LOE ID:	52714
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Escherichia coli.

Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37576**	**Region 3**
Tularcitos Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of the 23 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. These beneficial uses are fully supported. The most recent 11 samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Zero of the 11 samples exceed the evaluation guideline and, there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 23 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. of the 11 samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37576, Nitrate **Region 3**

Tularcitos Creek

LOE ID:	52734
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37576, Nitrate **Region 3**

Tularcitos Creek

LOE ID:	52750
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37576, Nitrate **Region 3**

Tularcitos Creek

LOE ID:	52695
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37576, Nitrate **Region 3**

Tularcitos Creek

LOE ID:	52474
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37576, Nitrate **Region 3**

Tularcitos Creek

LOE ID:	52475
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37576, Nitrate — Region 3

Tularcitos Creek

LOE ID:	52670
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37576, Nitrate — Region 3

Tularcitos Creek

LOE ID:	52694
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37576, Nitrate **Region 3**

Tularcitos Creek

LOE ID:	52492
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37576, Nitrate **Region 3**

Tularcitos Creek

LOE ID:	9429
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [

	307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37576, Nitrate **Region 3**

Tularcitos Creek

LOE ID:	9428
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **53512** **Region 3**

Tularcitos Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 11 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53512, Nitrogen, Nitrite **Region 3**

Tularcitos Creek

LOE ID:	52476
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrite as N.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

	livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36656**	**Region 3**
Tularcitos Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two of the 25 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 25 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 25 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 25 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	52672
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	52671
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	52751
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	52752
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	12914
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	12913
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	12936
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tularcitos Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/17/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	12935
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tularcitos Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/17/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	12934
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/17/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	12933
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/17/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	12897
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36656, Oxygen, Dissolved **Region 3**

Tularcitos Creek

LOE ID:	12898
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37515** **Region 3**

Tularcitos Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. [NUMBER] lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Zero of the 23 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 23 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37515, Specific Conductivity **Region 3**

Tularcitos Creek

LOE ID:	11059
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37515, Specific Conductivity **Region 3**

Tularcitos Creek

LOE ID:	52461
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Conductivity(Us).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	36983	Region 3
Tularcitos Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 25 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 25 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36983, Temperature, water	**Region 3**
Tularcitos Creek	

LOE ID:	52691
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to

	determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36983, Temperature, water **Region 3**

Tularcitos Creek

LOE ID:	12951
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 8/16/2002-8/17/2002. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36983, Temperature, water **Region 3**

Tularcitos Creek

LOE ID:	12932
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38657 **Region 3**

Tularcitos Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of the 23 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 2 of the 23 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 23 samples exceed the evaluation guideline for Cold Freshwater Habitat and 2 of the 23 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 38657, Turbidity — Region 3

Tularcitos Creek

LOE ID:	12917
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38657, Turbidity **Region 3**

Tularcitos Creek

LOE ID:	12916
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38657, Turbidity **Region 3**

Tularcitos Creek

LOE ID:	52674
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38657, Turbidity **Region 3**

Tularcitos Creek

LOE ID:	52754
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36605**	**Region 3**
Tularcitos Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Zero of the 23 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and Agricultural Supply. One of the 23 samples exceed the water quality objectives for Drinking Water and Recreation.These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 23 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and Agricultural Supply. One of the 23 samples exceed the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	52712
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	52753
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	52717
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	52715
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	52673
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	52477
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	11078
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	11077
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	11076
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	11075
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	11093
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36605, pH **Region 3**

Tularcitos Creek

LOE ID:	11074
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37561** **Region 3**

Tularcitos Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Natural Sources

TMDL Name:	Tularcitos Creek FIB TMDL
TMDL Project Code:	1070
Date TMDL Approved by USEPA:	11/30/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Eight of 23 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 2 of 23 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of 23 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Tularcitos Creek Fecal Indicator Bacteria TMDL has been approved by USEPA on 11/30/2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 37561, Fecal Coliform **Region 3**

Tularcitos Creek

LOE ID:	52716
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37561, Fecal Coliform **Region 3**

Tularcitos Creek

LOE ID:	52713
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tularcitos Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Lucia Watershed Rotation field data 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]

Temporal Representation:	Data was collected over the time period 1/7/2009-12/17/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37561, Fecal Coliform **Region 3**

Tularcitos Creek

LOE ID:	11058
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37561, Fecal Coliform **Region 3**

Tularcitos Creek

LOE ID:	11057

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Lucia (SantaLucia) data for Tularcitos Creek to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tularcitos Creek was collected at 1 monitoring site [307TUL-Tularcitos Creek at Carmel Valley Road]
Temporal Representation:	Data was collected over the time period 1/10/2002-3/5/2003. Santa Lucia Coast is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pescadero Creek (San Benito County)**
Water Body ID: **CAR3055003320020124124816**
Water Body Type: **River & Stream**

DECISION ID **41813** **Region 3**
Pescadero Creek (San Benito County)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE summarizes unionized ammonia data in which the single sample does not exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 15 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample does not exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 15 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41813, Ammonia — Region 3

Pescadero Creek (San Benito County)

LOE ID:	9331
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41813, Ammonia — Region 3

Pescadero Creek (San Benito County)

LOE ID:	17435
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [Stage Road, Butano State Park, 35.004 Bridge Crossing, Wurr Road, Gage Bridge, Canyon Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41813, Ammonia **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	9330
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-2/19/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41366 **Region 3**

Pescadero Creek (San Benito County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did exceed the Water Contact Recreation water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the Water Contact Recreation water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41366, Fecal Coliform **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	10200
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41366, Fecal Coliform **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	10199
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and

	Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41368 Region 3

Pescadero Creek (San Benito County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41368, Nitrate Region 3

Pescadero Creek (San Benito County)

LOE ID:	17453
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [Stage Road, Butano State Park, 35.004 Bridge Crossing, Wurr Road, Gage Bridge, Canyon Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41368, Nitrate **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	9332
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed

	the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-2/19/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41368, Nitrate **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	9350
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected over the time period 12/18/1997-2/19/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41368, Nitrate **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	17452
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [Stage Road, Butano State Park, 35.004 Bridge Crossing, Wurr Road, Gage Bridge, Canyon Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	41802	Region 3
Pescadero Creek (San Benito County)		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41802, Oxygen, Dissolved	**Region 3**
Pescadero Creek (San Benito County)	

LOE ID:	12129
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41802, Oxygen, Dissolved **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	12128
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced

below 7.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]

Temporal Representation: Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41802, Oxygen, Dissolved **Region 3**

Pescadero Creek (San Benito County)

LOE ID: 17560

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat
Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 8
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.

Data Reference: Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A
Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [35.004 Bridge Crossing, Butano State Park, Wurr Road, Gage Bridge, Canyon Road, Stage Road]

Temporal Representation: Data was collected over the time period 8/10/2003-10/12/2003.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

DECISION ID 41621 Region 3

Pescadero Creek (San Benito County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41621, Specific Conductivity — Region 3

Pescadero Creek (San Benito County)

LOE ID:	17545
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are

	as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [35.004 Bridge Crossing, Butano State Park, Wurr Road, Gage Bridge, Canyon Road, Stage Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41621, Specific Conductivity **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	10201
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41369 Region 3

Pescadero Creek (San Benito County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 9 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 9 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41369, Temperature, water Region 3

Pescadero Creek (San Benito County)

LOE ID:	17546
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [35.004 Bridge Crossing, Butano State Park, Wurr Road, Gage Bridge, Canyon Road, Stage Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41369, Temperature, water **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	12144
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41370 Region 3

Pescadero Creek (San Benito County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41370, Turbidity Region 3

Pescadero Creek (San Benito County)

LOE ID:	12130
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41382 Region 3

Pescadero Creek (San Benito County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. None of the 9 samples exceed the Agricultural Supply or Cold Freshwater Habitat water quality objectives and one of the 9 samples exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 9 samples exceed the Agricultural Supply or Cold Freshwater Habitat water quality objectives and one of the 9 samples exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	17472
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [35.004 Bridge Crossing, Butano State Park, Wurr Road, Gage Bridge, Canyon Road, Stage

	Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	17473
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [35.004 Bridge Crossing, Butano State Park, Wurr Road, Gage Bridge, Canyon Road, Stage Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	17456
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [35.004 Bridge Crossing, Butano State Park, Wurr Road, Gage Bridge, Canyon Road, Stage Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	17471
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [35.004 Bridge Crossing, Butano State Park, Wurr Road, Gage Bridge, Canyon Road, Stage Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	10260
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	10259
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	10202
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	17561
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 6 monitoring sites [

	35.004 Bridge Crossing, Butano State Park, Wurr Road, Gage Bridge, Canyon Road, Stage Road]
Temporal Representation:	Data was collected over the time period 8/10/2003-10/12/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	10203
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41382, pH **Region 3**

Pescadero Creek (San Benito County)

LOE ID:	10258
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pescadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pescadero Creek was collected at 1 monitoring site [305PES-Pescadero Creek]
Temporal Representation:	Data was collected on a single day 12/18/1997. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Clear Creek (San Benito County)**
Water Body ID: **CAR3055001320021004181146**
Water Body Type: **River & Stream**

DECISION ID **37692** **Region 3**
Clear Creek (San Benito County)

Pollutant:	**Mercury**
Final Listing Decision:	**Delist from 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Reason for Delisting:	Applicable WQS attained; due to restoration activities
TMDL Name:	Clear Creek and Hernandez Reservoir Mercury
TMDL Project Code:	123
Date TMDL Approved by USEPA:	06/21/2004
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 28 samples exceeded the California Toxics Rule criterion to protect human health. The TMDL was implemented through non-regulatory erosion control and mercury load control efforts of the USBLM. Since mid 2007, total mercury data from Clear Creek has shown significantly reduced mercury levels and is meeting the numeric target of 0.050 ug/L.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 28 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 37692, Mercury **Region 3**
Clear Creek (San Benito County)

LOE ID:	1867
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue

Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37692, Mercury **Region 3**

Clear Creek (San Benito County)

LOE ID:	59010
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: Zero of the 17 samples exceed the CTR value.
Data Reference:	Statewide Ref Condition Management Plan 2008 Draft Clear Creek Watershed Mercury TMDL Review California.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	California Toxics Rule criterion to protect human health exposure to mercury (total mercury) is 0.050 ug/L. This is also the numeric target identified for Clear Creek in the 2004 Mercury TMDL document (Total Maximum Daily Load Technical Support Analysis for Mercury Impairment of Clear Creek and Hernandez Reservoir).
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected one monitoring station; USGS gauge 11154700- Clear Creek near Idria, CA.
Temporal Representation:	Data summarized in this LOE were collected between November 2006 and December 2010, after the BLM completed remediation activities in the watershed in 2006. USGS data collected prior to remediation is not included in this LOE.
Environmental Conditions:	Mercury mine remediation in Clear Creek watershed was completed by BLM staff in 2006. This LOE only summarized data collected post remediation.
QAPP Information:	No QAPP was provided but data were collected by USGS staff and some Quality Control Data were provided in the report. Data are considered high quality.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37692, Mercury **Region 3**

Clear Creek (San Benito County)

LOE ID:	59012
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CCAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 7 samples exceed the CTR value.
Data Reference:	Statewide Ref Condition Management Plan 2008 Region 3 California Water Quality. Mercury. Marine Polution Studies Laboratory.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	California Toxics Rule criterion to protect human health exposure to mercury (total mercury) is 0.050 ug/L. This is also the numeric target identified for Clear Creek in the 2004 Mercury TMDL document (Total Maximum Daily Load Technical Support Analysis for Mercury Impairment of Clear Creek and Hernandez Reservoir).
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected sevenmonitoring stations.
Temporal Representation:	DatData summarized in this LOE were collected by SWAMP field staff on April 24, 2013.
Environmental Conditions:	None
QAPP Information:	Data were collected by SWAMP field staff that followed the SWAMP SOP for field collection for trace metals. Samples were analyzed, reported and verified following the method quality objectives identified in the SWAMP QAPrP (2008).
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37692, Mercury **Region 3**

Clear Creek (San Benito County)

LOE ID:	59011

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CCAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the CTR value.
Data Reference:	Statewide Ref Condition Management Plan 2008 Pelagic Organism Decline (POD): Acute and Chronic Invertebrate and Fish Toxicity Testing in the Sacramento-San Joaquin Delta 2008-2010
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	California Toxics Rule criterion to protect human health exposure to mercury (total mercury) is 0.050 ug/L. This is also the numeric target identified for Clear Creek in the 2004 Mercury TMDL document (Total Maximum Daily Load Technical Support Analysis for Mercury Impairment of Clear Creek and Hernandez Reservoir).
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected four monitoring stations; USGS gauge, 305CC06CC2, 305CC06CC1 and 305CC06CC6.
Temporal Representation:	Data summarized in this LOE were collected by SWAMP field staff on November 8, 2011.
Environmental Conditions:	None
QAPP Information:	Data were collected by SWAMP field staff that followed the SWAMP SOP for field collection for trace metals. Samples were analyzed, reported and verified following the method quality objectives identified in the SWAMP QAPrP (2008).
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47199 Region 3

Clear Creek (San Benito County)

Pollutant:	**Alkalinity as CaCO3**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the National Recommended Water Quality Criteria (2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the National Recommended Water Quality Criteria and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47199, Alkalinity as CaCO3 **Region 3**

Clear Creek (San Benito County)

LOE ID:	54021
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47199, Alkalinity as CaCO3 **Region 3**

Clear Creek (San Benito County)

LOE ID:	54022

Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47200 Region 3

Clear Creek (San Benito County)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for ammonia. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. single sample did not exceed the water quality objectives for ammonia and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47200, Ammonia **Region 3**

Clear Creek (San Benito County)

LOE ID:	54025
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories (USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006)).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47200, Ammonia **Region 3**

Clear Creek (San Benito County)

LOE ID:	54023
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47200, Ammonia **Region 3**

Clear Creek (San Benito County)

LOE ID:	54024
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47201 Region 3

Clear Creek (San Benito County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for nitrate. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives for nitrate and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47201, Nitrate Region 3

Clear Creek (San Benito County)

LOE ID:	54033
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47201, Nitrate **Region 3**

Clear Creek (San Benito County)

LOE ID:	54032
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47202	Region 3
Clear Creek (San Benito County)		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for dissolved oxygen. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47202, Oxygen, Dissolved	**Region 3**
Clear Creek (San Benito County)	

LOE ID:	54034
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47202, Oxygen, Dissolved **Region 3**

Clear Creek (San Benito County)

LOE ID:	54036
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47204 **Region 3**

Clear Creek (San Benito County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47204, Temperature, water **Region 3**

Clear Creek (San Benito County)

LOE ID:	54048
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1

	monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47205 Region 3

Clear Creek (San Benito County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. The single sample did exceed the water quality objectives for Drinking Water, Recreation, Cold and Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. [The single sample did exceed the water quality objectives but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47205, pH Region 3

Clear Creek (San Benito County)

LOE ID:	54038
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.

Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47205, pH **Region 3**

Clear Creek (San Benito County)

LOE ID:	54039
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47205, pH **Region 3**

Clear Creek (San Benito County)

LOE ID:	54044
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47205, pH **Region 3**

Clear Creek (San Benito County)

LOE ID:	54045
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47205, pH **Region 3**

Clear Creek (San Benito County)

LOE ID:	54037
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Clear Creek (San Benito County) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Ref Condition Management Plan 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Clear Creek (San Benito County) was collected at 1 monitoring site [Clear Creek - 906SUP076]
Temporal Representation:	Data was collected on a single day 6/11/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Llagas Creek (below Chesbro Reservoir)**
Water Body ID: **CAR3053002020020319075726**
Water Body Type: **River & Stream**

DECISION ID **34758** **Region 3**
Llagas Creek (below Chesbro Reservoir)

Pollutant: **pH**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant was removed from the CWA section 303(d) List, under section 4.2 of the Listing Policy, in the previous assessment cycle (2010). Under this section a single line of evidence is necessary to assess listing status.

Thirty-seven lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. One hundred sixteen of the 1147 samples exceed the water quality objective for Agriculture, 124 of the 1147 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and ten of the 1147 samples exceed the water quality objectives for Drinking Water and Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One hundred sixteen of the 1147 samples exceed the water quality objective for Agriculture, 124 of the 1147 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and ten of the 1147 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should remain removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**
Llagas Creek (below Chesbro Reservoir)

LOE ID: 48330

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10151
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48332
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48333
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48334
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.

Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48335
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 7 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48331
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 7 of 20 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10167
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	3956
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10413
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10412
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10411
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10410
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10374
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	90
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 11 of 90 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10373
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	90
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 7 of 90 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10375
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	90
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 8 of 90 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10391
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	90
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 11 of 90 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17712
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	966
Number of Exceedances:	103
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 103 of 966 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 12 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-BVA - Llagas Creek at Buena Vista Ave., LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17697
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	966
Number of Exceedances:	155
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 155 of 966 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 12 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-BVA - Llagas Creek at Buena Vista Ave., LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17711
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	966
Number of Exceedances:	155
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 155 of 966 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 12 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-BVA - Llagas Creek at Buena Vista Ave., LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17698
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	966
Number of Exceedances:	155
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 155 of 966 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 12 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-BVA - Llagas Creek at Buena Vista Ave., LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH — Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17695
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	966
Number of Exceedances:	108
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 108 of 966 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 12 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-BVA - Llagas Creek at Buena Vista Ave., LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH — Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17696
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	966
Number of Exceedances:	103
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 103 of 966 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 12 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-BVA - Llagas Creek at Buena Vista Ave., LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13810
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13811
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13807
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13808
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13809
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13792
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10389
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 8 of 90 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10390
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	90
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 8 of 90 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	54721
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	63
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 63 minimums and maximums of pH data had 5 exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations SW10, SW5A, SW6A, SW7, SW8, and SW9.
Temporal Representation:	Samples were collected quarterly from March 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	79010
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	63
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 63 minimums and maximums of pH data had 5 exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations SW10, SW5A, SW6A, SW7, SW8, and SW9.
Temporal Representation:	Samples were collected quarterly from March 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	79006
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	63
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 63 minimums and maximums of pH data had 5 exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations SW10, SW5A, SW6A, SW7, SW8, and SW9.
Temporal Representation:	Samples were collected quarterly from March 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	79007
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	63
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 63 minimums and maximums of pH data had 5 exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations SW10, SW5A, SW6A, SW7, SW8, and SW9.
Temporal Representation:	Samples were collected quarterly from March 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	79008
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	63
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 63 minimums and maximums of pH data had 5 exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations SW10, SW5A, SW6A, SW7, SW8, and SW9.
Temporal Representation:	Samples were collected quarterly from March 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34758, pH **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	79009
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	63
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 63 minimums and maximums of pH data had 5 exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from stations SW10, SW5A, SW6A, SW7, SW8, and SW9.

Temporal Representation:	Samples were collected quarterly from March 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID 42223 **Region 3**

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-one lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. A total of 328 of the 1049 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, and 84 of the 1049 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 328 of the 1049 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13775
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48325
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 17 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin

	Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48327
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 7 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48328
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 19 of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	12018
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	11999
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	102
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 34 of 102 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue,

	305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48329
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 19 of 20 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	11998
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	102
Number of Exceedances:	34
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 34 of 102 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	11997
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	109
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 4 of 109 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 7 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MAS-Llagas Creek at Masten Avenue, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	3955
Pollutant:	Low Dissolved Oxygen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17784
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	850
Number of Exceedances:	274
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 274 of 850 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 11 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-BVA - Llagas Creek at Buena Vista Ave., LL-LLC - Llagas Creek at Little Llagas at Church]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17800
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	850
Number of Exceedances:	54

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 54 of 850 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 11 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-BVA - Llagas Creek at Buena Vista Ave., LL-LLC - Llagas Creek at Little Llagas at Church]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	12035
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable

	water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	12034
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13789
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13790
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5

Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13791
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	12033
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	11981
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	109
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 16 of 109 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 7 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MAS-Llagas Creek at Masten Avenue, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	79005
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	63
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 50 minimums of Dissolved Oxygen concentrations had 16 exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SW5A, SW6A, SW7, SW8, SW9, and SW10 stations.
Temporal Representation:	Samples were collected quarterly from March 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42223, Oxygen, Dissolved **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	54712
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	63
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 50 minimums of Dissolved Oxygen concentrations had 16 exceedences.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the SW5A, SW6A, SW7, SW8, SW9, and SW10 stations.
Temporal Representation:	Samples were collected quarterly from March 2006 to December 2009.
Environmental Conditions:	
QAPP Information:	NPDES quality assurance.
QAPP Information Reference(s):	

DECISION ID	42187	Region 3
Llagas Creek (below Chesbro Reservoir)		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Five lines of evidence are available in the administrative record to assess this pollutant. A total of 402 of the 1076 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 402 of the 1076 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42187, Specific Conductivity	**Region 3**
Llagas Creek (below Chesbro Reservoir)	

LOE ID:	17868
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	402
Number of Exceedances:	400
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium

	(R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 400 of 402 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 8 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave]
Temporal Representation:	Data was collected over the time period 8/31/2004-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42187, Specific Conductivity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17494
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	574
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 2 of 574 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when

	conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 12 monitoring sites [Bloomfield Av. Bridge, LL-MON - Llagas Creek at Monterey Rd., LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CRB - Llagas Creek at Below Chesbro Res., LL-CHU - Llagas Creek at Church Ave, LL-SOU - Llagas Creek at Southside Ave., Highway 25, LL-LEA - Llagas Creek at Leavesley Rd., LL-BVA - Llagas Creek at Buena Vista Ave., LL-152 - Llagas Creek at Highway 152, LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland]
Temporal Representation:	Data was collected over the time period 10/1/2002-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42187, Specific Conductivity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48319
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42187, Specific Conductivity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10409
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42187, Specific Conductivity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10372
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	78
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 78 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 34760 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Total Dissolved Solids**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. This pollutant water segment combination was added to the 303(d) list prior to the creation of this assessment database and therefore the supporting documentation and data are not associated with the original

LOE. more recent data is summarized in LOE 48320 in which three of the 14 samples exceed the site specific water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 14 samples exceed the site specific water quality objective and the original data used to add this pollutant water segment to the 303(d) list is not available. there are not enough samples to determine if the beneficial use is supported.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 34760, Total Dissolved Solids **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	3958
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Agricultural Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34760, Total Dissolved Solids **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48320
Pollutant:	Total Dissolved Solids
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Dissolved Solids, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Basin Plan waterbody specific objectives, Table 3.7, page III-2. TDS shall not exceed 200 mg/L
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 41996 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. A total of 128 of the 282 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 127 of the 282 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and

Wahl D.H., 2009), both used to interpret the water quality objective for turbidity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 128 of the 282 samples exceed the evaluation guideline for Cold Freshwater Habitat and 127 of the 282 samples exceed the Warm Freshwater Habitat evaluation guideline and these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41996, Turbidity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48337
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41996, Turbidity — Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	12016
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	73
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 26 of 73 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41996, Turbidity — Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	12015
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	73
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 26 of 73 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41996, Turbidity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13827
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 3/28/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41996, Turbidity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13828
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 3/28/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41996, Turbidity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17468
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	184
Number of Exceedances:	99
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 99 of 184 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-MON - Llagas Creek at Monterey Rd., LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-SOU - Llagas Creek at Southside Ave., LL-152 - Llagas Creek at Highway 152]
Temporal Representation:	Data was collected over the time period 9/28/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41996, Turbidity — Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17469
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	184
Number of Exceedances:	99
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 99 of 184 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-MON - Llagas Creek at Monterey Rd., LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-SOU - Llagas Creek at Southside Ave., LL-152 - Llagas Creek at Highway 152]
Temporal Representation:	Data was collected over the time period 9/28/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41996, Turbidity — Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48336
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 41498 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. However, all of the data contained in LOE 1861 is also contained in LOE 10356, as well as additional data collected monthly in 2005. Therefore, LOE 1861 is not included in this decision. Thirty of 85 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 2 of 85 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the

Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty of 85 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Pajaro River Fecal Coliform TMDL has been approved by USEPA on 08/03/2010.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list in the 'Being Addressed' portion of the List because applicable water quality standards are exceeded, pollutant contributes to or causes the problem but a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41498, Fecal Coliform **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10356
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	85
Number of Exceedances:	30
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 30 of 85 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas

	Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41498, Fecal Coliform **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10357
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	85
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 2 of 85 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42219	Region 3
Llagas Creek (below Chesbro Reservoir)		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Pajaro River Nitrate (including Llagas Creek) TMDL
TMDL Project Code:	139
Date TMDL Approved by USEPA:	10/13/2006
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name has been changed from nutrients to nitrate.

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Thirty-nine of the 1215 nitrate samples exceed the water quality objective for the Agricultural Supply beneficial use. Four hundred eighteen of the 1215 nitrate samples and seven of the 14 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Zero of the 14 nitrate/nitrite samples and 13 of the 14 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 2.60 mg/L to 17.4 mg/L, at times exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). The water body is listed as impaired on the 303(d) list for dissolved oxygen.
2) Water column chlorophyll a concentration ranged from 0.083 ug/L to 32.0 at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body as high as 3.44 mg/L at one site. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 6 g/m2 ash-free dry weight (AFDW) to 81 g/m2 AFDW. Two sites exceeded the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 and one exceeded the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 16 mg/m2 to 157 mg/m2. One site exceeded the Cold Freshwater Habitat screening threshold of 150 mg/m2, but not the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Thirty-nine of the 1215 nitrate samples exceed the water quality objective for the Agricultural Supply beneficial use. Four hundred eighteen of the 1215 nitrate samples and seven of the 14 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. Zero of the 14 nitrate/nitrite samples and 13 of the 14 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment..
4. The Pajaro River Nitrate TMDL has been approved by USEPA on 10/13/2006.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42219, Nitrate **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48321
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42219, Nitrate — Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17957
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1124
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 38 of 1124 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 13 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland, LL-BVA - Llagas Creek at Buena Vista Ave., LL-WDA - Llagas Creek West branch at Day]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42219, Nitrate — Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17958
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1124
Number of Exceedances:	373
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 373 of 1124 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 13 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland, LL-BVA - Llagas Creek at Buena Vista Ave., LL-WDA - Llagas Creek West branch at Day]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42219, Nitrate **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48322
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 13 of 14 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun.

	2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42219, Nitrate **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	9335
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	91
Number of Exceedances:	45
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 45 of 91 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride

	concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42219, Nitrate **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48324
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 13 of 14 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42219, Nitrate **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48323
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 7 of 14 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42219, Nitrate **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	9334
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	91
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 91 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42219, Nitrate **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	54701
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	30 of 43 samples collected at the sample sites exceeded the water quality objective for nitrate. Samples were reported as Nitrate as N.

Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	entral Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3. The maximum contaminant level for Nitrite plus Nitrate is 10 mg/L as N.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at stations SW-7, SW-8, SW-9, and SW-10.
Temporal Representation:	Samples were taken quarterly from 3/21/2006 to 12/8/2009. No data was reported the first three quarters of 2009.
Environmental Conditions:	There was no water at Station SW-9 for the majority of the sampling dates.
QAPP Information:	Monitoring data submitted for the purpose of NPDES permitting. Permit No-R3-2010-0009.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42219, Nitrate **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	54700
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	8 of 43 samples collected at the sample sites exceeded the water quality objective for nitrate. 6 exceedences occurred at location SW-8. 2 exceedences occurred at location SW-9.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of advers effect shall be as derived from Table 3-3 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-3 shows that concentrations of nitrate as N greater than 30 mg/L will cause sever problems for sensitive crops.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at stations SW-7, SW-8, SW-9, and SW-10.
Temporal Representation:	Samples were taken quarterly from 3/21/2006 to 12/8/2009. No data was reported the first three quarters of 2009.
Environmental Conditions:	There was no water at Station SW-9 for the majority of the sampling dates.
QAPP Information:	Monitoring data submitted for the purpose of NPDES permitting. Permit No-R3-2010-0009.
QAPP Information Reference(s):	

DECISION ID	34587	Region 3
Llagas Creek (below Chesbro Reservoir)		

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agriculture-grazing | Habitat Modification | Hydromodification | Irrigated Crop Production | Land Development | Resource Extraction | Silviculture
TMDL Name:	Pajaro River Siltation/Sedimentation (including San Benito R., Llagas Cr., Rider Gulch Cr.)
TMDL Project Code:	140
Date TMDL Approved by USEPA:	05/03/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment/pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. Two of the two samples have degraded biological community composition (EPT taxa richness less than 12) associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the two samples have degraded biological community composition (EPT taxa richness less than 12) associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34587, Sedimentation/Siltation	Region 3
Llagas Creek (below Chesbro Reservoir)	

LOE ID:	95252
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Llagas Creek. At two of the two stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. In addition, less than 12 EPT taxa (EPT richness) were present at two of the two stations indicating degraded biological diversity and community composition at these locations. It is likely that degraded benthic invertebrate community condition is impacted by sediment deposition in this stream.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	Two monitoring locations: Below Bloomfield (2009), Below Edmundson (2009).
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34587, Sedimentation/Siltation **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	1865
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

DECISION ID 42220 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Eleven lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Eight LOEs summarize unionized ammonia data in which one of the 140 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 1225 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 140 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 1225 samples exceed the EPA's Lifetime Health advisory level for total ammonia. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42220, Ammonia Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17779
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1123
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 1123 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 13 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-LLC - Llagas Creek at Little Llagas at Church, LL-WHI - Llagas Creek West Branch at Highland, LL-BVA - Llagas Creek at Buena Vista Ave., LL-WDA - Llagas Creek West branch at Day]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13759
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48316
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1

	monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48315
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13772
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	9177
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	91
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 91 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	9317
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	83
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 83 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]

Temporal Representation: Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID: 9318

Pollutant: Ammonia (Unionized)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 83

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 83 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]

Temporal Representation: Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48314
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	54706
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 43 samples collected at the sample sites exceeded the Basin Plan Objective for unionized ammonia.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	1999 Update of Ambient Water Quality Criteria for Ammonia
Spatial Representation:	Samples were collected at stations SW-7, SW-8, SW-9, and SW-10.
Temporal Representation:	Samples were taken quarterly from 3/21/2006 to 12/8/2009. No data was reported the first three quarters of 2009.
Environmental Conditions:	There was no water at Station SW-9 for the majority of the sampling dates.
QAPP Information:	Monitoring data submitted for the purpose of NPDES permitting. Permit No-R3-2010-0009.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42220, Ammonia **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	54692
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 43 samples collected at the sample sites exceeded the water quality objective for unionized ammonia. Sample values for ammonia are assumed to be for total ammonia as N and were converted to unionized ammonia as N before being compared with the objective.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at stations SW-7, SW-8, SW-9, and SW-10.
Temporal Representation:	Samples were taken quarterly from 3/21/2006 to 12/8/2009. No data was reported the first three quarters of 2009.
Environmental Conditions:	There was no water at Station SW-9 for the majority of the sampling dates.

QAPP Information:	Monitoring data submitted for the purpose of NPDES permitting. Permit No-R3-2010-0009.
QAPP Information Reference(s):	

DECISION ID 42222 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One of the 120 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 120 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42222, Chlorophyll-a Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13774
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42222, Chlorophyll-a **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13773
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42222, Chlorophyll-a **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	9333
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 95 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42222, Chlorophyll-a **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48318
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42222, Chlorophyll-a **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	9319
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 95 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive, 305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42222, Chlorophyll-a **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48317
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 42207 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Seventy-four of the 1064 samples exceed the evaluation guideline (Moyle 1976) used to interpret the aquatic life water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-four of the 1064 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42207, Temperature, water Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	17638
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	878
Number of Exceedances:	70
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 70 of 878 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 11 monitoring sites [LL-LEA - Llagas Creek at Leavesley Rd., LL-SOU - Llagas Creek at Southside Ave., LL-MON - Llagas Creek at Monterey Rd., LL-152 - Llagas Creek at Highway 152, LL-CRB - Llagas Creek at Below Chesbro Res., Bloomfield Av. Bridge, LL-BAC - Llagas Creek at Bloomfield Av. Confl., LL-CHU - Llagas Creek at Church Ave, Highway 25, LL-BVA - Llagas Creek at Buena Vista Ave., LL-LLC - Llagas Creek at Little Llagas at Church]
Temporal Representation:	Data was collected over the time period 10/1/2002-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42207, Temperature, water **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	12036
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42207, Temperature, water **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	12000
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 4 of 95 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 6 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue, 305LUC-Llagas Creek at Luchessa Avenue/Southside Drive,

	305MON-Llagas Creek at Monterey Road, 305OAK-Llagas Creek at Oak Glen Avenue, 305VIS-Llagas Creek at Buena Vista Avenue]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42207, Temperature, water **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	13826
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42207, Temperature, water **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	48338
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek (below Chesbro Reservoir)]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42207, Temperature, water **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	54727
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	63
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 63 samples exceeded the evaluation guideline for temperature in this water

	body.
Data Reference:	Data for temperature and nutrients in Llegas Creek, Mar. 2006-Dec. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected the following 6 sites in Llagas Creek (below Chesbro Reservoir: SW5A: A location at the outlet of Miller Slough near Luchessa Avenue bridge SW6A: A location at the outlet of the city storm drain near Luchessa Avenue bridge SW7: A location in Llagas Creek 600 feet north of Bloomfield Rd SW8: A location in Llagas Creek 637 feet north of the northwest corner of Pond E1 and south of Highway 152 SW9: A location in Llagas Creek 1000 feet north of Highway 152 SW10: A location in Llagas Creek on north side of Bloomfield Rd bridge
Temporal Representation:	Samples were collected quarterly between 3/21/2006 and 12/8/2009 at sites SW6A, SW7, SW8, and SW10 and on the following dates from site SW9: 3/21/2006, 6/12/2006, 3/19/2007, 3/18/2008. At site SW5A, samples were collected quarterly from 3/21/06-6/9/2008.
Environmental Conditions:	
QAPP Information:	Monitoring data submitted for the purpose of NPDES permitting. Permit No-R3-2010-0009.
QAPP Information Reference(s):	

DECISION ID 42020 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize sediment samples. Three sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, six total samples are available to assess toxic effects in sediment samples. Zero of the six sediment samples resulted in a significant toxic effect to one or more test organisms. Fourteen LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and nine additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, sixteen total samples are available to assess toxic effects in water samples. One of the sixteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 6 sediment samples and 1 of the 16 water samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	54730
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	

Spatial Representation:	The samples were collected at 305LCS - Llagas Creek at Southside.
Temporal Representation:	The samples were collected in April 2007, May 2008 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	54729
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. One of the nine samples exhibited significant toxicity. Each test included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth, Selenastrum capricornutum growth. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The sample collected on 1/27/09 exhibited significant toxicity to Ceriodaphnia dubia reproduction and survival. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305LCS - Llagas Creek at Southside.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version) Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	79014
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. One of the nine samples exhibited significant toxicity. Each test included survival and reproduction of Ceriodaphnia dubia, Pimephales promelas survival and growth, Selenastrum capricornutum growth. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The sample collected on 1/27/09 exhibited significant toxicity to Ceriodaphnia dubia reproduction and survival. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305LCS - Llagas Creek at Southside.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version) Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	79015
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305LCS - Llagas Creek at Southside.
Temporal Representation:	The samples were collected in April 2007, May 2008 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24154
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24185
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside].
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24144
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24117
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected on a single day 5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24162
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24152
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24186
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24161
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24187
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24126
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001)

	data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24143
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24145
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24118
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected on a single day 5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24153
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24125
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42020, Toxicity **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	24178
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 1 monitoring site [305LCS - Llagas Creek at Southside].
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	41433	Region 3
Llagas Creek (below Chesbro Reservoir)		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Pajaro River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	998
Date TMDL Approved by USEPA:	11/12/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under 3.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Three of the three samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. This decision will not use one of the water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of two sediment samples (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of the three samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Pajaro River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on November 12, 2013.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41433, Chlorpyrifos **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	16142
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41433, Chlorpyrifos **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	16299
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41433, Chlorpyrifos **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	16298
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41433, Chlorpyrifos **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	16143
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and

	results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 32912 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.2 (Conventional and Other Pollutants) of the Listing Policy. Under section 4.2 a single line of evidence is adequate to assess delisting status. One line of evidence is available in the administrative record to assess this pollutant. Per Table 4.2 of the Policy, a sufficient number of samples exceed the applicable water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy-eight out of 78 samples exceeded the applicable chloride water quality objective and this exceeds the maximum allowable frequency necessary to delist from Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32912, Chloride **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	1862
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	78
Number of Exceedances:	78
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	There were a total of 78 water samples and all 78 samples exceeded the water quality objective (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: 106 mg/L for chloride.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There were 4 sampling stations.
Temporal Representation:	There were quarterly sampling events.
Environmental Conditions:	
QAPP Information:	South County Regional Wastewater Authority (SCRWA) QA/QC.
QAPP Information Reference(s):	

DECISION ID 42212 **Region 3**

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 22

samples exceed the water quality objective for Agricultural Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 22 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42212, Boron **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	9336
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41444 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of 2 sediment samples (pore water) exceeded the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41444, Diazinon Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	16722
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41444, Diazinon **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	16802
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41444, Diazinon **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	16803
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41444, Diazinon **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	16721
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305LLA-Llagas Creek at Bloomfield Avenue, 305HOL-Llagas Creek at Holsclaw and Leavesley Roads]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42316 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Nine of 22 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 22 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of 22 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42316, Escherichia coli (E. coli) **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10393
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42316, Escherichia coli (E. coli) **Region 3**

Llagas Creek (below Chesbro Reservoir)

LOE ID:	10392
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	22
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (below Chesbro Reservoir) to determine beneficial use support and results are as follows: 9 of 22 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Llagas Creek (below Chesbro Reservoir) was collected at 2 monitoring sites [305HOL-Llagas Creek at Holsclaw and Leavesley Roads, 305LLA-Llagas Creek at Bloomfield Avenue]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 34759 Region 3

Llagas Creek (below Chesbro Reservoir)

Pollutant:	**Sodium**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Nonpoint Source | Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34759, Sodium Region 3

Llagas Creek (below Chesbro Reservoir)

LOE ID:	3957

Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Agricultural Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Tres Pinos Creek**
Water Body ID: **CAR3053002020020124151519**
Water Body Type: **River & Stream**

DECISION ID	37439	Region 3
Tres Pinos Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under section 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Six of 17 samples exceeded the water contact recreation water quality objective and two of the 17 samples exceeded the non-contact water quality objective. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. Furthermore, in accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 17 samples exceeded the Water Contact Recreation water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Pajaro River Fecal Coliform TMDL was been approved by USEPA on 08/03/2010.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37439, Fecal Coliform **Region 3**

Tres Pinos Creek

LOE ID:	10994
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 6 of 17 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 12/19/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37439, Fecal Coliform **Region 3**

Tres Pinos Creek

LOE ID:	10995
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 2 of 17 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 12/19/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36673**	**Region 3**
Tres Pinos Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE summarize unionized ammonia data in which zero of the 16 samples exceed the water quality

objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 318 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 samples exceed the water quality objective for unionized ammonia and zero of the 18 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36673, Ammonia **Region 3**

Tres Pinos Creek

LOE ID:	9369
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 12/19/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36673, Ammonia **Region 3**

Tres Pinos Creek

LOE ID:	17833
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36673, Ammonia **Region 3**

Tres Pinos Creek

LOE ID:	9372
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 2/19/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37117** **Region 3**

Tres Pinos Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Four of the 7 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 7 samples exceed the Agricultural Supply water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37117, Boron **Region 3**

Tres Pinos Creek

LOE ID:	9374
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 2/22/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36979** **Region 3**

Tres Pinos Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 7 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 7 samples exceed the Agricultural Supply water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36979, Chloride **Region 3**

Tres Pinos Creek

LOE ID:	9375
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 2/22/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38827**	**Region 3**
Tres Pinos Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 17 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 17 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38827, Chlorophyll-a **Region 3**

Tres Pinos Creek

LOE ID:	9373
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 2/19/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36626** **Region 3**

Tres Pinos Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 18 samples exceed the water quality objective for Agricultural Supply or the Evaluation Guideline (USEPA 2006) as it is applies to the Municipal and Domestic Supply beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the water quality objective for Agricultural Supply or the Evaluation Guideline (USEPA 2006) as it is applies to the Municipal and Domestic Supply beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36626, Nitrate **Region 3**

Tres Pinos Creek

LOE ID:	9370
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 12/19/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36626, Nitrate **Region 3**

Tres Pinos Creek

LOE ID:	9371
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [

	305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 12/19/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36626, Nitrate **Region 3**

Tres Pinos Creek

LOE ID:	17728
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36626, Nitrate **Region 3**

Tres Pinos Creek

LOE ID:	17742
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**36818**	**Region 3**
Tres Pinos Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 21 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 21 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36818, Oxygen, Dissolved **Region 3**

Tres Pinos Creek

LOE ID:	12001
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in

	summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36818, Oxygen, Dissolved **Region 3**

Tres Pinos Creek

LOE ID:	11983
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 1/23/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36818, Oxygen, Dissolved **Region 3**

Tres Pinos Creek

LOE ID:	11986
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36818, Oxygen, Dissolved **Region 3**

Tres Pinos Creek

LOE ID:	11982
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 1/23/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36818, Oxygen, Dissolved **Region 3**

Tres Pinos Creek

LOE ID:	17876
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	36904	Region 3
Tres Pinos Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Four of the 7 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 7 samples exceed the Agricultural Supply water quality objective, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36904, Sodium	**Region 3**
Tres Pinos Creek	

LOE ID:	9376
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 2/22/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36861**	**Region 3**
Tres Pinos Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. One of the 20 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 20 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36861, Specific Conductivity **Region 3**

Tres Pinos Creek

LOE ID:	11033
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36861, Specific Conductivity **Region 3**

Tres Pinos Creek

LOE ID:	17904
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36861, Specific Conductivity **Region 3**

Tres Pinos Creek

LOE ID:	10996
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 1/23/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38633**	**Region 3**
Tres Pinos Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. However, a recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) categorizes Tres Pinos Creek as having "Unknown population or insufficient data" and specifically states the following: "Tres Pinos Creek was sampled between 1972 and 1974 by Dr. Jerry Smith. O. mykiss was not observed in the three sampling locations." Therefore this turbidity guideline is not relevant to this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The turbidity Evaluation Guideline (Sigler et al., 1984) is not relevant for this waterbody as it has no known steelhead populations. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38633, Turbidity **Region 3**

Tres Pinos Creek

LOE ID:	17559
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38633, Turbidity **Region 3**

Tres Pinos Creek

LOE ID:	11984
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	13
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 7 of 13 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 1/23/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37631**	**Region 3**
Tres Pinos Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Six of 7

samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 7 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 7 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37631, Escherichia coli (E. coli) **Region 3**

Tres Pinos Creek

LOE ID:	11031
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 6 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 2/22/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37631, Escherichia coli (E. coli) **Region 3**

Tres Pinos Creek

LOE ID:	11032
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 2/22/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37094** **Region 3**

Tres Pinos Creek

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Natural Sources | Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Five of the 21 samples exceed the water quality objective for Warm Freshwater Habitat, 8 of the 21 samples exceed the water quality objective for Agricultural Supply, and 16 of the 21 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 21 samples exceed the water quality objective for Warm Freshwater Habitat, 8 of the 21 samples exceed the water quality objective for Agricultural Supply, and 16 of the 21 samples exceed the water quality objectives for Drinking Water and Recreation. All of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	11016
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 5 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not

	be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 1/23/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	11012
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	18
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 7 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 1/23/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	11013
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 13 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 1/23/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	10123
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	10124
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	10125
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	10126
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	17396
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A

	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	11015
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	18
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 13 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 1/23/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	11014
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 13 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 1/23/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	11034
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [305TRE-Tres Pinos Creek at Southside road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	16926
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	17395
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	17394

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37094, pH **Region 3**

Tres Pinos Creek

LOE ID:	16927
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tres Pinos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither

	be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tres Pinos Creek was collected at 1 monitoring site [TP-H25]
Temporal Representation:	Data was collected on a single day 6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacheco Creek**
Water Body ID: **CAR3053002020020103133745**
Water Body Type: **River & Stream**

DECISION ID **41269** **Region 3**
Pacheco Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Eleven of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 27 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Pajaro River Fecal Coliform TMDL has been approved by USEPA on 08/03/2010.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41269, Fecal Coliform **Region 3**

Pacheco Creek

LOE ID:	10165
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41269, Fecal Coliform **Region 3**

Pacheco Creek

LOE ID:	10122
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 11 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41742**	**Region 3**
Pacheco Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 27 samples exceed the General water quality objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 27 samples exceed the General water quality objective set to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41742, Ammonia **Region 3**

Pacheco Creek

LOE ID:	9321
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41742, Ammonia **Region 3**

Pacheco Creek

LOE ID:	9320
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41742, Ammonia **Region 3**

Pacheco Creek

LOE ID:	17797
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	432
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 432 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).

Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 8 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut, PC-SFL PC-DOW Casa de Fruta]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41742, Ammonia **Region 3**

Pacheco Creek

LOE ID:	9322
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41614	Region 3
Pacheco Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41614, Boron	**Region 3**
Pacheco Creek	

LOE ID:	9327
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41625 Region 3

Pacheco Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the Agricultural Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41625, Chloride Region 3

Pacheco Creek

LOE ID:	9328
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41626**	**Region 3**
Pacheco Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 24

samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 24 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41626, Chlorophyll-a **Region 3**

Pacheco Creek

LOE ID:	9326
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 2/19/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41626, Chlorophyll-a **Region 3**

Pacheco Creek

LOE ID:	9325
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 2/19/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41750 Region 3

Pacheco Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (Seipmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41750, Chlorpyrifos Region 3

Pacheco Creek

LOE ID:	16249
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41750, Chlorpyrifos **Region 3**

Pacheco Creek

LOE ID:	16248
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001)

	data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41162**	**Region 3**
Pacheco Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Neither of the two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41162, Diazinon **Region 3**

Pacheco Creek

LOE ID:	16671
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41162, Diazinon **Region 3**

Pacheco Creek

LOE ID:	16672
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41229** **Region 3**

Pacheco Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Four of the 15 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 15 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41229, Escherichia coli (E. coli) **Region 3**

Pacheco Creek

LOE ID:	10220
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41229, Escherichia coli (E. coli) **Region 3**

Pacheco Creek

LOE ID:	10221
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41230** **Region 3**

Pacheco Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Five of the 498 samples exceed the Municipal and Domestic Supply water quality objective but none of the 498 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 498 samples exceed the Municipal and Domestic Supply water quality objective but none of the 498 samples exceed the Agricultural Supply water quality objective. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41230, Nitrate **Region 3**

Pacheco Creek

LOE ID:	17676
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	435
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 5 of 435 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed

	in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 8 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut, PC-SFL PC-DOW Casa de Fruta]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41230, Nitrate **Region 3**

Pacheco Creek

LOE ID:	17675
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	435
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 435 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 8 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut, PC-SFL PC-DOW Casa de Fruta]
Temporal Representation:	Data was collected over the time period 10/1/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41230, Nitrate — Region 3

Pacheco Creek

LOE ID:	9324
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41230, Nitrate — Region 3

Pacheco Creek

LOE ID:	13750
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41230, Nitrate **Region 3**

Pacheco Creek

LOE ID:	13764
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed

	in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41230, Nitrate **Region 3**

Pacheco Creek

LOE ID:	9323
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41796	Region 3
Pacheco Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the Agricultural Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41796, Sodium	**Region 3**
Pacheco Creek	

LOE ID:	9329
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41228**	**Region 3**
Pacheco Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision to specific conductivity. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 222 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 222 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41228, Specific Conductivity **Region 3**

Pacheco Creek

LOE ID:	10222
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41228, Specific Conductivity **Region 3**

Pacheco Creek

LOE ID:	17529
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	157
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 157 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 4 monitoring sites [Lover's Lane, PC-SFR - Pacheco Creek at San Felipe Rd., PC-156 - Pacheco Creek at Highway 156, Walnut]
Temporal Representation:	Data was collected over the time period 10/1/2002-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41228, Specific Conductivity **Region 3**

Pacheco Creek

LOE ID:	13850
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41228, Specific Conductivity **Region 3**

Pacheco Creek

LOE ID:	10166
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41244 Region 3

Pacheco Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Nine of the 413 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 413 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41244, Temperature, water Region 3

Pacheco Creek

LOE ID:	12127
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows:

	0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41244, Temperature, water **Region 3**

Pacheco Creek

LOE ID:	17397
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	347
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 6 of 347 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 5 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut]
Temporal Representation:	Data was collected over the time period 10/1/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41244, Temperature, water **Region 3**

Pacheco Creek

LOE ID:	12108
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41244, Temperature, water **Region 3**

Pacheco Creek

LOE ID:	14109
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 36 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**41609**	**Region 3**
Pacheco Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant in water samples. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Two samples

are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). Zero of the two samples were toxic to test organisms (exhibited a significant increase in mortality or decrease in cell density compared to the laboratory control).

The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples were toxic to test organisms. Therefore, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41609, Toxicity **Region 3**

Pacheco Creek

LOE ID:	24438
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41609, Toxicity **Region 3**

Pacheco Creek

LOE ID:	24581
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [

	305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41609, Toxicity **Region 3**

Pacheco Creek

LOE ID:	24583
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41609, Toxicity — Region 3

Pacheco Creek

LOE ID:	24571
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41609, Toxicity — Region 3

Pacheco Creek

LOE ID:	24582
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41609, Toxicity **Region 3**

Pacheco Creek

LOE ID:	24439
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41752**	**Region 3**
Pacheco Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of 451 samples exceed the Agricultural Supply water quality objective, 21 of 451 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and 33 of 451 samples exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-two of 451 samples exceed the Agricultural Supply water quality objective, 21 of 451 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and 33 of 451 samples exceed the numeric objectives for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	16912
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	385
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 12 of 385 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 5 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut]
Temporal Representation:	Data was collected over the time period 10/1/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10240
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10242
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	17805
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	385
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 12 of 385 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 5 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut]

Temporal Representation:	Data was collected over the time period 10/1/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	17806
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	385
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 12 of 385 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 5 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut]
Temporal Representation:	Data was collected over the time period 10/1/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	17807
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	385
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 19 of 385 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 5 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut]
Temporal Representation:	Data was collected over the time period 10/1/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	17808
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	385
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 19 of 385 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 5 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut]
Temporal Representation:	Data was collected over the time period 10/1/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	17809
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	385
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 19 of 385 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 5 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut]
Temporal Representation:	Data was collected over the time period 10/1/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10241
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10223
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10184
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10219
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10239
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10181
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10182
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	14074
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 9 of 36 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10243
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	13855
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 9 of 36 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	13854
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 10 of 36 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	13870
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 13 of 36 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	13869
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	36
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 13 of 36 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation: Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID: 13871

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 36
Number of Exceedances: 13

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 13 of 36 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation: Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID: 10183

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 1 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41752, pH **Region 3**

Pacheco Creek

LOE ID:	10180
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41239**	**Region 3**
Pacheco Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Ten lines of evidence are available in the administrative record to assess these pollutants. Two water quality objectives are assessed: 148 of the 377 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and 39 of the 377 samples also exceed the dissolved oxygen water quality objective for Warm Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 148 of the 377 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	12037
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 4 of 30 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	12111
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	12110
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	12126
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	17837
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	344
Number of Exceedances:	145
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 145 of 344 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 5 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut]
Temporal Representation:	Data was collected over the time period 10/1/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	12284
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 3 of 31 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	12285
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 3 of 31 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	17838
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	344
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 36 of 344 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 5 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., PC-NFK - Pacheco Creek at North Fork, Walnut]
Temporal Representation:	Data was collected over the time period 10/1/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	12112
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pacheco Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41239, Oxygen, Dissolved **Region 3**

Pacheco Creek

LOE ID:	12050
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 4 of 30 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	44693	Region 3
Pacheco Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Six lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In addition, A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Pacheco Creek as having "Definite run or population". Therefore this Turbidity Evaluation Guideline is relevant to the waterbody. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-one of 163 samples exceeded the Evaluation Guideline (Sigler et al., 1984) applied to protect

for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44693, Turbidity **Region 3**

Pacheco Creek

LOE ID:	12052
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 3 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44693, Turbidity **Region 3**

Pacheco Creek

LOE ID:	13700

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 17 of 36 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44693, Turbidity **Region 3**

Pacheco Creek

LOE ID:	17505
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	107
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 21 of 107 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 4 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., Walnut]
Temporal Representation:	Data was collected over the time period 9/28/2005-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44693, Turbidity **Region 3**

Pacheco Creek

LOE ID:	17504
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	107
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pacheco Creek to determine beneficial use support and results are as follows: 21 of 107 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 4 monitoring sites [Lover's Lane, PC-156 - Pacheco Creek at Highway 156, PC-SFR - Pacheco Creek at San Felipe Rd., Walnut]
Temporal Representation:	Data was collected over the time period 9/28/2005-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44693, Turbidity **Region 3**

Pacheco Creek

LOE ID:	13701
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Pacheco Creek to determine beneficial use support and results are as follows: 17 of 36 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 2 monitoring sites [Walnut, Lover's Lane]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44693, Turbidity **Region 3**

Pacheco Creek

LOE ID:	12051
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	20
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pacheco Creek to determine beneficial use support and results are as follows: 3 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pacheco Creek was collected at 1 monitoring site [305PAC-Pacheco Creek at San Felipe Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Tequisquita Slough**
Water Body ID: **CAR3053002020011121091332**
Water Body Type: **River & Stream**

DECISION ID **36857** **Region 3**
Tequisquita Slough

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2018
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Thirty of the 164 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and therefore this use is not supported. However, only 4 of the 22 samples exceeded the water quality objective for dissolved oxygen in Fish Spawning Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Fish Spawning Habitat and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty of the 164 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36857, Oxygen, Dissolved **Region 3**

Tequisquita Slough

LOE ID:	12070
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36857, Oxygen, Dissolved **Region 3**

Tequisquita Slough

LOE ID:	48887
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	22
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tequisquita Slough

	to determine beneficial use support and results are as follows: 4 of 22 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tequisquita Slough at Shore Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36857, Oxygen, Dissolved **Region 3**

Tequisquita Slough

LOE ID:	48889
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tequisquita Slough to determine beneficial use support and results are as follows: 10 of 22 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tequisquita Slough at Shore Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36857, Oxygen, Dissolved **Region 3**

Tequisquita Slough

LOE ID:	48888
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tequisquita Slough at Shore Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36857, Oxygen, Dissolved **Region 3**

Tequisquita Slough

LOE ID:	17823
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	121

Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tequisquita Slough to determine beneficial use support and results are as follows: 26 of 121 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 2 monitoring sites [TS-SHO - Tequisquita Slough at Shore Rd., at Lake Rd]
Temporal Representation:	Data was collected over the time period 12/23/2002-1/24/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36857, Oxygen, Dissolved **Region 3**

Tequisquita Slough

LOE ID:	13670
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36857, Oxygen, Dissolved **Region 3**

Tequisquita Slough

LOE ID:	13654
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36857, Oxygen, Dissolved **Region 3**

Tequisquita Slough

LOE ID:	12071
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 9 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39289** **Region 3**

Tequisquita Slough

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Sixty-nine of the 83 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-nine of the 83 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39289, Turbidity **Region 3**

Tequisquita Slough

LOE ID:	17503
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	42
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tequisquita Slough to determine beneficial use support and results are as follows: 42 of 44 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 2 monitoring sites [TS-SHO - Tequisquita Slough at Shore Rd., at Lake Rd]
Temporal Representation:	Data was collected over the time period 9/28/2005-1/24/2007.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39289, Turbidity **Region 3**

Tequisquita Slough

LOE ID:	13629
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 4 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39289, Turbidity **Region 3**

Tequisquita Slough

LOE ID:	12072
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 11 of 11 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39289, Turbidity **Region 3**

Tequisquita Slough

LOE ID:	48902
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tequisquita Slough to determine beneficial use support and results are as follows: 12 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tequisquita Slough at Shore Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 44853 Region 3

Tequisquita Slough

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Three beneficial uses are assessed. Eleven of the 162 samples exceed the water quality objective for Warm Freshwater Habitat, and 36 of the 162 samples exceed the water quality objectives for Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-six of the 162 samples exceed the water quality objectives for Recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44853, pH Region 3

Tequisquita Slough

LOE ID:	13671
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	13673
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	11278
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	17752
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	122
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tequisquita Slough to determine beneficial use support and results are as follows: 5 of 122 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 2 monitoring sites [TS-SHO - Tequisquita Slough at Shore Rd., at Lake Rd]
Temporal Representation:	Data was collected over the time period 12/23/2002-1/24/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	17751
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	122
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tequisquita Slough to determine beneficial use support and results are as follows: 23 of 122 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 2 monitoring sites [TS-SHO - Tequisquita Slough at Shore Rd., at Lake Rd]
Temporal Representation:	Data was collected over the time period 12/23/2002-1/24/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	17750
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Tequisquita Slough to determine beneficial use support and results are as follows: 23 of 122 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 2 monitoring sites [TS-SHO - Tequisquita Slough at Shore Rd., at Lake Rd]
Temporal Representation:	Data was collected over the time period 12/23/2002-1/24/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	48901
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tequisquita Slough to determine beneficial use support and results are as follows: 5 of 22 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tequisquita Slough at Shore Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	48891
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	22
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tequisquita Slough to determine beneficial use support and results are as follows: 9 of 22 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tequisquita Slough at Shore Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	48890
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tequisquita Slough to determine beneficial use support and results are as follows: 9 of 22 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tequisquita Slough at Shore Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	13672
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	11277
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44853, pH **Region 3**

Tequisquita Slough

LOE ID:	11276
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**33537**	**Region 3**
Tequisquita Slough		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle. This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Eleven of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 8 of 12 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the

Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 8 of 12 samples exceed the water quality objective for non-contact recreation. Both of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Pajaro River Fecal Coliform TMDL has been approved by USEPA on 08/03/2010.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33537, Fecal Coliform **Region 3**

Tequisquita Slough

LOE ID:	11274
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33537, Fecal Coliform **Region 3**

Tequisquita Slough

LOE ID:	11275
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 8 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36618** **Region 3**

Tequisquita Slough

Pollutant:	**Ammonia**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion	2018

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant unionized ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Three of the 35 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 35 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 36618, Ammonia **Region 3**

Tequisquita Slough

LOE ID:	13652
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-3/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36618, Ammonia **Region 3**

Tequisquita Slough

LOE ID:	9179
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road].
Temporal Representation:	Data was collected over the time period 12/18/1997-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36618, Ammonia **Region 3**

Tequisquita Slough

LOE ID:	48875
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tequisquita Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tequisquita Slough at Shore Rd]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36618, Ammonia **Region 3**

Tequisquita Slough

LOE ID:	58595
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Tequisquita Slough to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [Tequisquita Slough - 305TSR]
Temporal Representation:	Data was collected over the time period 4/27/2009-12/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**39090**	**Region 3**
Tequisquita Slough		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Nine of the 36 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 36 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39090, Chlorophyll-a **Region 3**

Tequisquita Slough

LOE ID:	48876
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Tequisquita Slough to determine beneficial use support and results are as follows: 9 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tequisquita Slough at Shore Rd]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39090, Chlorophyll-a **Region 3**

Tequisquita Slough

LOE ID:	13653

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39090, Chlorophyll-a **Region 3**

Tequisquita Slough

LOE ID:	9366
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TES-Tequisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/19/1998-12/16/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39423**	**Region 3**
Tequisquita Slough		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, four total samples are available to assess toxic effects in sediment samples. One of the four sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Four LOEs summarize water samples. Three water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, fourteen total samples are available to assess toxic effects in water samples. Five of the fourteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 14 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 39423, Toxicity **Region 3**

Tequisquita Slough

LOE ID:	24657
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Tequisquita Slough to determine beneficial use support and results

	are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39423, Toxicity **Region 3**

Tequisquita Slough

LOE ID:	24654
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected on a single day 5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39423, Toxicity **Region 3**

Tequisquita Slough

LOE ID:	24652
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road].
Temporal Representation:	Data was collected between 2/21/06 and 9/21/06. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39423, Toxicity **Region 3**

Tequisquita Slough

LOE ID:	24656
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Tequisquita Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Tequisquita Slough was collected at 1 monitoring site [305TSR - Tesquisquita Slough at Shore Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39423, Toxicity **Region 3**

Tequisquita Slough

LOE ID:	58608
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Five of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The sample collected on 1/24/08 exhibited significant toxicity to Pimephales promelas growth. Four samples collected on 9/30/08, 1/27/09, 8/25/09 and 9/30/09 exhibited significant toxicity to Ceriodaphnia dubia reproduction. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the

	mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305TSR Tequisquita Slough at Shore Road.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39423, Toxicity **Region 3**

Tequisquita Slough

LOE ID:	58607
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity to Hyalella azteca survival. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305TSR Tequisquita Slough.
Temporal Representation:	The samples were collected in annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Carnadero Creek (Uvas Creek below Bloomfield Road)**
Water Body ID: **CAR3053002019990223155037**
Water Body Type: **River & Stream**

DECISION ID **38207** **Region 3**
Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant: **pH**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twenty lines of evidence are available in the administrative record to assess this pollutant. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Eight of the 55 samples exceed the water quality objectives for Drinking Water and Recreation and 4 of the 55 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. Eight of the 55 samples exceed the water quality objectives for Drinking Water and Recreation and 4 of the 55 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats. None of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**
Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID: 48103

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	10351
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48105
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48117

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 2 of 17 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48104
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 17 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	10350
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	10349
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	10348
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples

	exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	10352
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	14094
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carnadero Creek to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [Bloomfield]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	14093
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	18
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carnadero Creek to determine beneficial use support and results are as follows: 8 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [Bloomfield]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	14092
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carnadero Creek to determine beneficial use support and results are as follows: 8 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor

	raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [Bloomfield]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	14091
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carnadero Creek to determine beneficial use support and results are as follows: 8 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [Bloomfield]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	14090

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carnadero Creek to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [Bloomfield]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13823
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13822
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13821
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13806

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13805
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38207, pH **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48102
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 2 of 17 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	38141	Region 3
Carnadero Creek (Uvas Creek below Bloomfield Road)		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Five of the 33 nitrate samples and four of the 12 nitrate/nitrite samples exceed the water quality objective for the Drinking Water beneficial use. Nine of the 12 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment.

1) Dissolved oxygen for this water body ranged from 2.69 mg/L to 17.34 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and at times exceeds the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010).
2) Water column chlorophyll a concentration ranged from 0.01 to 28.8 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging from2.70 mg/L to 2.72 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
4) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass ranging at sites from 61 g/m2 ash-free dry weight (AFDW) to 66 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2, but not the warm water screening threshold of 80 grams/m2, respectively (Creager, et al., 2006).
5) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations ranging at sites from 152 mg/m2 to 164 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2, but not the Warm Freshwater Habitat screening threshold of 200 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that: 1
. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 33 nitrate samples and four of the 12 nitrate/nitrite samples exceed the water quality objective for the Drinking Water beneficial use. Nine of the 12 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy and there is

	evidence in support of the conclusion that nitrate contributes to or causes a bio stimulatory effect in this water segment. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38141, Nitrate **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48086
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38141, Nitrate **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13765
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [Bloomfield]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38141, Nitrate **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48087
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38141, Nitrate **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48088
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 9 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.

Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38141, Nitrate **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	9269
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID 38161 Region 3

Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Thirteen lines of evidence are available in the administrative record to assess this pollutant. Three water quality objectives are assessed. Twenty of the 38 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 2 of the 38 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for both Cold and Warm Freshwater Habitats and the dissolved oxygen levels are supporting those beneficial uses. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty of the 38 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved Region 3

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	12014
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 8 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	12013
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 8 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable

	water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48101
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 7 of 18 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48100
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 7 of 18 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	12012
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48089
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 5 of 18 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48090
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 2 of 18 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	12011
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13804
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13803
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13802
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38161, Oxygen, Dissolved **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13788
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38312 Region 3

Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Eighteen of the 49 samples exceed the evaluation guidelines (Sigler et al.,1984, and Shoup, D.E. and Wahl D.H., 2009) used to interpret the turbidity water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eighteen of the 49 samples exceed the evaluation guidelines and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38312, Turbidity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	12029
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 7/20/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38312, Turbidity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13702
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carnadero Creek to determine beneficial use support and results are as follows: 11 of 18 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [Bloomfield]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38312, Turbidity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48119
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to

	determine beneficial use support and results are as follows: 5 of 18 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38312, Turbidity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	12030
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 7/20/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38312, Turbidity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13716
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carnadero Creek to determine beneficial use support and results are as follows: 11 of 18 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [Bloomfield]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38312, Turbidity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48118
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 5 of 18 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38312, Turbidity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13840
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 3/28/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38312, Turbidity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13839
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 3/28/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38150 Region 3

Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 24206) and total ammonia (Decision 24326). This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Six LOEs summarize unionized ammonia data in which zero of the 27samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 24 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38150, Ammonia Region 3

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	9268

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38150, Ammonia **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48155
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38150, Ammonia **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48156
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38150, Ammonia **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48145
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38150, Ammonia **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	9266
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38150, Ammonia **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	9267
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38150, Ammonia **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13771
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38150, Ammonia **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13785
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40264 **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 36 samples exceed the the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 36 samples exceed the the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40264, Chlorophyll-a **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	9271
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40264, Chlorophyll-a **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13787
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural

	Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40264, Chlorophyll-a **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13786
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40264, Chlorophyll-a **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	9270
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40264, Chlorophyll-a **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48157
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40264, Chlorophyll-a **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48158
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 38515 **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 56 samples exceed the evaluation guideline (Moyle 1976) the evaluation guideline used to interpret the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 56 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38515, Temperature, water **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	13824
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38515, Temperature, water **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	14110
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [Bloomfield]
Temporal Representation:	Data was collected over the time period 12/28/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP.

However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38515, Temperature, water **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	48120
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN - Carnadero Creek]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38515, Temperature, water **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	12028
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41837 Region 3

Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nineteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Six LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in sediment samples. Zero of the five sediment samples resulted in a significant toxic effect to one or more test organisms. Thirteen LOEs summarize water samples. Five water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity)

and six additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eleven total samples are available to assess toxic effects in water samples. One of the eleven water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the sediment samples and one of the 11 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23772
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23771
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23786
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23782
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23774
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23773
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23763
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23762
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0

	of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23788
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23787
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and

	cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23781
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23780
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23779
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 5/18/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23767
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23764
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	23766
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	78947
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests for the samples included survival and regrowth of Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the sample from station 305SJA on 5/18/06 is not included in this LOE. That sample was included in LOEs for the previous assessment cycle and therefore is not counted again here.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305CAN, Carnadero Creek.
Temporal Representation:	The samples were collected in April 2007, May 2008 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	53916
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. None of the samples exhibited significant toxicity. The toxicity tests for the samples included survival and regrowth of Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the sample from station 305SJA on 5/18/06 is not included in this LOE. That sample was included in LOEs for the previous assessment cycle and therefore is not counted again here.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

	that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305CAN, Carnadero Creek.
Temporal Representation:	The samples were collected in April 2007, May 2008 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41837, Toxicity **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	53917
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate water toxicity. One of the six samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas survival and growth, total cell count (growth) of Selenastrum capricornutum. The one sample exhibited significant toxicity to Ceriodaphnia dubia reproduction and survival (1/27/09). It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305CAN, Carnadero Creek.
Temporal Representation:	The samples were collected between January 2008 and 2009 and March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The project QAPP was provided.

QAPP Information Reference(s): Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	38184	Region 3
Carnadero Creek (Uvas Creek below Bloomfield Road)		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Five of the 15 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 15 samples exceed the water quality objective for Non-Contact Recreation. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2.

In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. Although the TMDL does not set targets for E.coli specifically, E.coli is a fecal coliform and the implementation to address the pollutant is identical.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 15 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this meets or exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Total Maximum Daily Loads for fecal
coliform in the Pajaro River Watershed was approved by the USEPA on August 3, 2010.
5.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38184, Escherichia coli (E. coli) **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	10332
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38184, Escherichia coli (E. coli) **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	10331
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38144 Region 3

Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle, however a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Five of 15 samples exceeded the water quality objective for Water Contact Recreation. None of the 15 samples exceeded the objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence from the 2010 assessment indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. There is now sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section [NUMBER] of the Policy.

2. The data used satisfies the data quantity requirements of section NUMBER of the Policy.
3. Five of 15 samples exceeded the water quality objective for Water Contact Recreation and this meets or exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Pajaro RIver Watershed Fecal Coliform TMDL has been approved by the by USEPA on August 3, 2010.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list in the 'Being Addressed' portion of the List because applicable water quality standards are exceeded, pollutant contributes to or causes the problem but a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 38144, Fecal Coliform **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	10330
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38144, Fecal Coliform **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	10329
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Carnadero Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42010** **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:

No new data are assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. This decision will not use the two water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero samples exceed the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42010, Chlorpyrifos **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	16332
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42010, Chlorpyrifos **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	15631
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42010, Chlorpyrifos **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	15632
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson

	(2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42010, Chlorpyrifos **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	16331
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41854 Region 3

Carnadero Creek (Uvas Creek below Bloomfield Road)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41854, Diazinon Region 3

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	16658
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41854, Diazinon **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	16754
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3

	Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41854, Diazinon **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	16657
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41854, Diazinon **Region 3**

Carnadero Creek (Uvas Creek below Bloomfield Road)

LOE ID:	16755
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Carnadero Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Carnadero Creek was collected at 1 monitoring site [

	305CAN-Carnadero Creek at Private Property Access]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Furlong Creek**
Water Body ID: **CAR3053002019990222111932**
Water Body Type: **River & Stream**

DECISION ID	39700	Region 3
Furlong Creek		

Pollutant: **Chlorpyrifos**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.1 and 4.6 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 4.6, a minimum of two lines of evidence are needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. One of one water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. This decision will not use one of the water samples collected because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy.The single sediment sample (pore water) will not be used in the assessment because the lab detected chlorpyrifos but was unable to quantify the result because the reporting limit exceeds the evaluation guideline. Therefore, the results could not be quantified with the level of certainty required by the Listing Policy. This single pore water sample contributed to the original listing during the 2010 listing cycle. This decision does not use the pore water samples in the exceedance count due to the laboratory results. Additionally, There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One of one samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 39700, Chlorpyrifos **Region 3**

Furlong Creek

LOE ID:	15647
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39700, Chlorpyrifos **Region 3**

Furlong Creek

LOE ID:	16314
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39700, Chlorpyrifos **Region 3**

Furlong Creek

LOE ID:	15634
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39700, Chlorpyrifos **Region 3**

Furlong Creek

LOE ID:	16315
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	39629	Region 3
Furlong Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed.This decision has not changed from the 2010 listing cycle. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 15 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Two LOEs summarize total ammonia data and zero of the 125 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 15 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 125 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39629, Ammonia **Region 3**

Furlong Creek

LOE ID:	9342
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39629, Ammonia **Region 3**

Furlong Creek

LOE ID:	17775
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	110
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 110 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/11/2003-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39629, Ammonia **Region 3**

Furlong Creek

LOE ID:	9344
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39629, Ammonia **Region 3**

Furlong Creek

LOE ID:	9343
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40150** **Region 3**

Furlong Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Seven of the 15 samples exceed the Water Contact Recreation objective and this supports rejection of the null hypothesis. Four of the 15 samples exceed the water quality objective for Non-Contact Recreation; this beneficial use is fully supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 15 samples exceed the water quality objective for Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40150, Fecal Coliform **Region 3**

Furlong Creek

LOE ID:	10274
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40150, Fecal Coliform **Region 3**

Furlong Creek

LOE ID:	10275
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39379**	**Region 3**
Furlong Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 14 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 14 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39379, Chlorophyll-a **Region 3**

Furlong Creek

LOE ID:	9316
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39379, Chlorophyll-a **Region 3**

Furlong Creek

LOE ID:	9174
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39716 **Region 3**

Furlong Creek

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Note that one sample is interstitial water. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39716, Diazinon — Region 3

Furlong Creek

LOE ID:	16819
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39716, Diazinon **Region 3**

Furlong Creek

LOE ID:	16738
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39716, Diazinon **Region 3**

Furlong Creek

LOE ID:	16820
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39716, Diazinon **Region 3**

Furlong Creek

LOE ID:	16737
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40148	Region 3
Furlong Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Sixteen of the 120 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 3 of the 120 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for this pollutant is set at 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixteen of the 120 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 3 of the 120 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved	**Region 3**
Furlong Creek	

LOE ID:	11960
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved **Region 3**

Furlong Creek

LOE ID:	16910
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	103
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 3 of 103 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/18/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved **Region 3**

Furlong Creek

LOE ID:	11962
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved **Region 3**

Furlong Creek

LOE ID:	11940
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved **Region 3**

Furlong Creek

LOE ID:	11963
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved **Region 3**

Furlong Creek

LOE ID:	11961
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved **Region 3**

Furlong Creek

LOE ID:	11924
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved **Region 3**

Furlong Creek

LOE ID:	17765
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	103
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 16 of 103 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/18/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved **Region 3**

Furlong Creek

LOE ID:	11942
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]

Temporal Representation: Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40148, Oxygen, Dissolved **Region 3**

Furlong Creek

LOE ID: 11941

Pollutant: Dissolved oxygen saturation
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat
Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 15
Number of Exceedances: 4

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Oxygen, Saturation.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]

Temporal Representation: Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID 40169 **Region 3**

Furlong Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One of the 120 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 120 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use nd this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40169, Temperature, water — Region 3

Furlong Creek

LOE ID:	11977
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40169, Temperature, water **Region 3**

Furlong Creek

LOE ID:	11943
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40169, Temperature, water **Region 3**

Furlong Creek

LOE ID:	17620
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	103
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 103 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/18/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **42492** **Region 3**

Furlong Creek

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

Two LOEs summarize sediment samples. One sediment sample is summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and zero additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, one total sample is available to assess toxic effects in sediment samples. Zero of the one sediment sample resulted in a significant toxic effect to one or more test organisms.

Six LOEs summarize water samples. Two water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess toxic effects in water samples. One of the two water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the two water samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42492, Toxicity **Region 3**

Furlong Creek

LOE ID:	24242
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival

	endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42492, Toxicity **Region 3**

Furlong Creek

LOE ID:	24206
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42492, Toxicity **Region 3**

Furlong Creek

LOE ID:	24219
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42492, Toxicity **Region 3**

Furlong Creek

LOE ID:	24218
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42492, Toxicity **Region 3**

Furlong Creek

LOE ID:	24243
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42492, Toxicity **Region 3**

Furlong Creek

LOE ID:	24232
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42492, Toxicity **Region 3**

Furlong Creek

LOE ID:	24231
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42492, Toxicity **Region 3**

Furlong Creek

LOE ID:	24196
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when

	compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/5/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39758**	**Region 3**
Furlong Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. None of the 121 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Eight of the 121 samples exceed the water quality objectives for Municipal and Domestic Supply, Water Contact Recreation, and Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 121 samples exceed the water quality objectives for Cold and Warm Freshwater Habitat.

	Eight of the 121 samples exceed the water quality objectives for Municipal and Domestic Supply, Water Contact Recreation, and Non-Contact Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10293
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	17909

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	104
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 8 of 104 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/18/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	17908
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	104
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 104 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/18/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	17912
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	104
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 104 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/18/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	17911
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	104
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 8 of 104 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/18/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	17910
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	104
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 8 of 104 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/18/2003-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10313
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10317

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10316
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10315
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10314
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 9/7/2005-9/8/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10297
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10296
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10294
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39758, pH **Region 3**

Furlong Creek

LOE ID:	10295
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40104**	**Region 3**
Furlong Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of

the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Seven of the 15 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Four of the 15 samples exceed the water quality objective for Non-Contact Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 15 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40104, Escherichia coli (E. coli) **Region 3**

Furlong Creek

LOE ID:	10276
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]

Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40104, Escherichia coli (E. coli) **Region 3**

Furlong Creek

LOE ID:	10277
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40162** **Region 3**

Furlong Creek

Pollutant: **Nitrate**

Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. One hundred twenty-three of 125 samples exceed the water quality objective for Municipal and Domestic Supply and this supports rejection of the null hypothesis. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred twenty-three of 125 samples exceed the water quality objective for Municipal and Domestic Supply and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40162, Nitrate **Region 3**

Furlong Creek

LOE ID:	17939
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	110
Number of Exceedances:	108
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 108 of 110 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 3/11/2003-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40162, Nitrate **Region 3**

Furlong Creek

LOE ID:	9345
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 15 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 1/25/2005-3/15/2006. Pajaro watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40164** **Region 3**

Furlong Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Twenty-eight of 41 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This Evaluation Guideline is relevant for Furlong Creek as it is a tributary to Llagas Creek. A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Llagas Creek as having "Definite run or population" and Furlong Creek is a tributary to Llagas Creek. Therefore, discharge of turbid water from Furlong Creek is specifically prohibited by the General Objectives in the Central Coast Water Quality Control Plan which states that waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-eight of 41 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40164, Turbidity **Region 3**

Furlong Creek

LOE ID:	17451
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 22 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 9/28/2005-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40164, Turbidity **Region 3**

Furlong Creek

LOE ID:	11959
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 6 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 7/20/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40164, Turbidity **Region 3**

Furlong Creek

LOE ID:	11944
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Furlong Creek to determine beneficial use support and results are as follows: 6 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [305FUF-Furlong Creek at Fraiser Lake Road]
Temporal Representation:	Data was collected over the time period 7/20/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40164, Turbidity **Region 3**

Furlong Creek

LOE ID:	17466
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Furlong Creek to determine beneficial use support and results are as follows: 22 of 32 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Furlong Creek was collected at 1 monitoring site [FC-FLR]
Temporal Representation:	Data was collected over the time period 9/28/2005-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Benito River**
Water Body ID: **CAR3053002019981207091641**
Water Body Type: **River & Stream**

DECISION ID	39936	Region 3
San Benito River		

Pollutant: **Toxicity**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. The previous decision to add this water segment - pollutant combination to the list was based on two samples resulting in a significant decrease in the cell count of the algal test organism (Selenastrum capricornutum). However, both of those samples had specific conductivities above the tolerance level of the test organism. According to SWAMP guidance (July 2013) for S. capricornutum toxicity testing should 1) include appropriate salinity controls when sample conductivities exceed 1500 uS/cm and 2) if conductivity exceeds 3000 uS/cm, use alternate species or forgo testing. The conductivity of the sample water from both January 2006 and May 2006 was higher than 1500 uS/cm, the threshold for which a high salinity control should have been used to evaluate the toxicity of the sample. The significance of the toxic effect for the two samples results summarized in this LOE (24397) were not calculated using the high salinity control sample and therefore should not be used alone as the basis of a decision to list this water segment. Therefore, the sample and exceedance count for this decision do not include these two samples and are revised as follows: One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Two samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and five additional samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, seven total samples are available to assess this pollutant. One of the seven samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the seven samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection but this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. One sample is summarized in an LOE using the test organism as the pollutant (i.e. invertebrate toxicity) and one additional sample is summarized in an LOE using the pollutant name Â‘toxicityÂ’. Therefore, two total samples are available to assess this pollutant. Zero of the two samples exceed the water quality objective for aquatic life protection because they did not result in a significant toxic effect to the test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) List because the previous decision to add this water body-pollutant combination to the List was based on faulty data.

Line of Evidence (LOE) for Decision ID 39936, Toxicity **Region 3**

San Benito River

LOE ID:	24397
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Benito River to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39936, Toxicity **Region 3**

San Benito River

LOE ID:	24396
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Benito River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39936, Toxicity **Region 3**

San Benito River

LOE ID:	24384
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39936, Toxicity **Region 3**

San Benito River

LOE ID:	24385
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 1/10/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39936, Toxicity **Region 3**

San Benito River

LOE ID:	24253
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39936, Toxicity **Region 3**

San Benito River

LOE ID:	57757

Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Five samples were collected to evaluate water toxicity. One of the five samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The sample collected on 9/30/14 exhibited significant toxicity to the reproduction and survival of Ceriodaphnia dubia.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305SAN-San Benito River at Y Road and at 305SBH - San Benito River @ Hollister near 156.
Temporal Representation:	The samples were collected from January 2008 - September 2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version) Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39936, Toxicity **Region 3**

San Benito River

LOE ID:	57758
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity tests for the sample included survival and growth of Hyalella azteca.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The sample was collected at 305SAN-San Benito at Y Road and 305SBH - San Benito River @ Hollister near 156.
Temporal Representation:	The sample was collected on 5/1/2008.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The Project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, Sacramento, CA. State Water Resources Control Board, SWAMP, December 2002 (1st version) Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**39890**	**Region 3**
San Benito River		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Four lines of evidence are available in the administrative record to assess this pollutant. Sixty-five of the 278 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty-five of the 278 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39890, Specific Conductivity **Region 3**

San Benito River

LOE ID:	10291
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 5 of 42 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39890, Specific Conductivity **Region 3**

San Benito River

LOE ID:	11161
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Benito River to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39890, Specific Conductivity **Region 3**

San Benito River

LOE ID:	17510
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	233
Number of Exceedances:	58
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 58 of 233 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [SB-YRD - San Benito River at Y Road]
Temporal Representation:	Data was collected over the time period 8/20/2001-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39890, Specific Conductivity **Region 3**

San Benito River

LOE ID:	48943
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 39161 Region 3

San Benito River

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Fifty-one of the 378 samples exceed the water quality objectives for Agricultural Supply, 25 of the 378 samples exceed the water quality objectives for Warm Freshwater Habitat, and 67 of the 378 samples exceeded the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-seven of the 378 samples exceeded the water quality objectives for Drinking Water and Recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39161, pH Region 3

San Benito River

LOE ID:	10309
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 15 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	10310
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 17 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	10311
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 17 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	10312
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	43
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 17 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	10328
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 6 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	48979
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	17591
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	332
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 50 of 332 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 4 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir]
Temporal Representation:	Data was collected over the time period 10/23/2001-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	17592
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	332
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 19 of 332 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 4 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir]
Temporal Representation:	Data was collected over the time period 10/23/2001-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	11178
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Benito River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	11163
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Benito River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	11162
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Benito River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	11179
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Benito River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	11180
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Benito River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	17576
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	332
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 50 of 332 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 4 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir]
Temporal Representation:	Data was collected over the time period 10/23/2001-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	17575
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	332
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 50 of 332 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 4 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir]
Temporal Representation:	Data was collected over the time period 10/23/2001-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	48961
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	48962
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	48963
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	48964
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39161, pH **Region 3**

San Benito River

LOE ID:	17574
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	332
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 36 of 332 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Benito River was collected at 4 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir]
Temporal Representation:	Data was collected over the time period 10/23/2001-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **32588** **Region 3**

San Benito River

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle. This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of 42 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 6 of 42 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-two of 42 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Pajaro River Fecal Coliform TMDL has been approved by USEPA on 08/03/2010. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32588, Fecal Coliform **Region 3**

San Benito River

LOE ID:	10289
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	22
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 22 of 42 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32588, Fecal Coliform **Region 3**

San Benito River

LOE ID:	10290
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	42
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito

	River to determine beneficial use support and results are as follows: 6 of 42 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39852**	**Region 3**
San Benito River		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE summarizes unionized ammonia data in which zero of the 42 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize total ammonia data and zero of the 464 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 42 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 464 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.
These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39852, Ammonia **Region 3**

San Benito River

LOE ID:	9260
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39852, Ammonia **Region 3**

San Benito River

LOE ID:	9261
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39852, Ammonia **Region 3**

San Benito River

LOE ID:	17814
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	422
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are

	as follows: 0 of 422 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 5 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir, SB-AHR]
Temporal Representation:	Data was collected over the time period 8/20/2001-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39784**	**Region 3**
San Benito River		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 41 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 41 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39784, Chlorophyll-a — Region 3

San Benito River

LOE ID:	9265
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 2/19/1998-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39784, Chlorophyll-a — Region 3

San Benito River

LOE ID:	48942

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**39749**	**Region 3**
San Benito River		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of

Conclusion:	the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Forty-one of the 330 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-one of the 330 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39749, Oxygen, Dissolved **Region 3**

San Benito River

LOE ID:	12268
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	45
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 2 of 45 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39749, Oxygen, Dissolved **Region 3**

San Benito River

LOE ID:	48960
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39749, Oxygen, Dissolved **Region 3**

San Benito River

LOE ID:	11886
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Benito River to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39749, Oxygen, Dissolved **Region 3**

San Benito River

LOE ID:	11885
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Benito River to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 8/30/2005-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39749, Oxygen, Dissolved **Region 3**

San Benito River

LOE ID:	12267
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 0 of 46 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39749, Oxygen, Dissolved **Region 3**

San Benito River

LOE ID:	17858
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	281
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 40 of 281 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 4 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir]
Temporal Representation:	Data was collected over the time period 11/21/2001-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39749, Oxygen, Dissolved **Region 3**

San Benito River

LOE ID:	48959
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**39217**	**Region 3**
San Benito River		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. The evaluation guideline used in LOEs 17522 and 12283 are not relevant for this water segment because it is specific to steel head trout and a recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) categorizes San Benito River as having "Possibly Absent" steelhead populations and specifically states the following: Staff from NMFS found O. mykiss to be absent from the San Benito River in 2003. Therefore only one line of evidence is available in the administrative record to assess this pollutant. LOE 48980 evaluated the data compared to an evaluation guideline that is relevant for this waterbody and the single sample summarized in that LOE does not exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), used to interpret the water quality objective for turbidity. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample summarized in that LOE does not exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39217, Turbidity **Region 3**

San Benito River

LOE ID:	48980
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SANxxx - San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/1/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 39217, Turbidity **Region 3**

San Benito River

LOE ID:	17522
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	71
Number of Exceedances:	42
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 42 of 71 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 4 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir]
Temporal Representation:	Data was collected over the time period 9/28/2005-2/22/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39217, Turbidity **Region 3**

San Benito River

LOE ID:	12283
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	11

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 11 of 29 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40005** **Region 3**

San Benito River

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of two water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). However, LOE# 16347 should have stated that zero of zero samples exceeded the evaluation guideline because the method detection limit and reporting limits were greater than the evaluation guideline and the results were non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. Again, the method detection limit and reporting limits were greater than the evaluation guideline and the results were non-detect. There is no

chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and none of the water sample exceeded the municipal and domestic supply objective. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40005, Chlorpyrifos **Region 3**

San Benito River

LOE ID:	16280
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40005, Chlorpyrifos **Region 3**

San Benito River

LOE ID:	16347
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Benito River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39681 Region 3

San Benito River

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. The single sediment sample (pore water) did not exceed the evaluation guideline (Finalyson, 2004). There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39681, Diazinon Region 3

San Benito River

LOE ID:	16770
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Benito River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/17/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39681, Diazinon **Region 3**

San Benito River

LOE ID:	16703
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Benito River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 1 monitoring site [305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39951**	**Region 3**
San Benito River		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 465 samples exceed the Municipal & Domestic Supply water quality objective and one of the 465 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 465 samples exceed the Municipal & Domestic Supply water quality objective and one of the 465 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39951, Nitrate **Region 3**

San Benito River

LOE ID:	9264
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39951, Nitrate **Region 3**

San Benito River

LOE ID:	17707
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	423
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 2 of 423 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 5 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir, SB-AHR]
Temporal Representation:	Data was collected over the time period 8/20/2001-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39951, Nitrate **Region 3**

San Benito River

LOE ID:	17693
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	423
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Benito River to determine beneficial use support and results are as follows: 1 of 423 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 5 monitoring sites [SB-YRD - San Benito River at Y Road, SB-PA - San Benito River at Pajaro junction, SB-BWC - San Benito River at below Willow Creek, SB-BHR - San Benito River at below Hernandez Reservoir, SB-AHR]
Temporal Representation:	Data was collected over the time period 8/20/2001-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39951, Nitrate **Region 3**

San Benito River

LOE ID:	9263
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]

Temporal Representation:	Data was collected over the time period 12/18/1997-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39889** **Region 3**

San Benito River

Pollutant:	**Boron**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-four of 30 samples exceeded the water quality objective for Agricultural Supply and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39889, Boron **Region 3**

San Benito River

LOE ID:	9262
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply

Number of Samples:	30
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 24 of 30 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39945**	**Region 3**
San Benito River		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Sixteen of 30 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 2 of 30 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixteen of 30 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39945, Escherichia coli (E. coli) **Region 3**

San Benito River

LOE ID:	10308
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39945, Escherichia coli (E. coli) Region 3

San Benito River

LOE ID:	10292
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Benito River to determine beneficial use support and results are as follows: 16 of 30 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Benito River was collected at 2 monitoring sites [305BRI-San Benito River at Highway 25, 305SAN-San Benito at Y Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/14/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 33748 Region 3

San Benito River

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Agriculture | Grazing-Related Sources | Harvesting, Restoration, Residue Management | Highway/Road/Bridge Runoff | Hydromodification | Road Construction | Surface Mining | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Siltation/Sedimentation (including San Benito R., Llagas Cr., Rider Gulch Cr.)
TMDL Project Code:	140
Date TMDL Approved by USEPA:	05/03/2007
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. There are no data associated with this decision however, the Pajaro River Siltation/Sedimentation TMDL (including San Benito R., Llagas Cr., Rider Gulch Cr.) was approved for this water segment-pollutant combination by USEPA on 5/03/07. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33748, Sedimentation/Siltation **Region 3**

San Benito River

LOE ID:	1859
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Bodfish Creek**
Water Body ID: **CAR3053001019990223102143**
Water Body Type: **River & Stream**

DECISION ID **37245** **Region 3**
Bodfish Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the two samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 37245, Ammonia **Region 3**
Bodfish Creek

LOE ID: 17851

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Bodfish Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bodfish Creek was collected at 1 monitoring site [152]
Temporal Representation:	Data was collected over the time period 4/14/2003-12/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37336**	**Region 3**
Bodfish Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the water quality objectives for Agricultural Supply or Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the water quality objectives for Agricultural Supply or Municipal and Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the

Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37336, Nitrate **Region 3**

Bodfish Creek

LOE ID:	17764
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Bodfish Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bodfish Creek was collected at 1 monitoring site [152]
Temporal Representation:	Data was collected over the time period 4/14/2003-12/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37336, Nitrate **Region 3**

Bodfish Creek

LOE ID:	17763
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Bodfish Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bodfish Creek was collected at 1 monitoring site [152]
Temporal Representation:	Data was collected over the time period 4/14/2003-12/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Llagas Creek (above Chesbro Reservoir)**
Water Body ID: **CAR3052001419980826100148**
Water Body Type: **River & Stream**

DECISION ID **40995** **Region 3**
Llagas Creek (above Chesbro Reservoir)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data are assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the nine samples exceed the water quality objective for unionized ammonia set to protect aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Two LOEs summarize total ammonia data and zero of the 99 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 99 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40995, Ammonia **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	9288
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40995, Ammonia **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17798
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	88

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 88 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40995, Ammonia **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	9290
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40995, Ammonia **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	9289
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40998	Region 3
Llagas Creek (above Chesbro Reservoir)		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 11 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 11 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40998, Chlorophyll-a	Region 3
Llagas Creek (above Chesbro Reservoir)	

LOE ID:	9292
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40998, Chlorophyll-a **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	9291
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40991 Region 3

Llagas Creek (above Chesbro Reservoir)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 10 samples exceed the water quality objective for Water Contact Recreation. Three of the 10 samples exceed the water quality objective for Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 10 samples exceed the water quality objective for Water Contact Recreation. Three of the 10 samples exceed the water quality objective for Water Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40991, Fecal Coliform **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	10368
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 3 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40991, Fecal Coliform **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	10369

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40997 Region 3

Llagas Creek (above Chesbro Reservoir)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 99 samples exceed the water equality objective for Municipal and Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 99 samples exceed the water equality objective for Municipal and Domestic Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40997, Nitrate **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	9293
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40997, Nitrate **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17691
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	88
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 88 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40997, Nitrate **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17690
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	88
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 88 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40997, Nitrate **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	9294
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California

	Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40990 Region 3

Llagas Creek (above Chesbro Reservoir)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Eight of the 94 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, three of the 94 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 94 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats, three of the 94 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40990, Oxygen, Dissolved **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	12047
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40990, Oxygen, Dissolved **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17839
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	80
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 6 of 80 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40990, Oxygen, Dissolved **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17840
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	80
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 3 of 80 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen

	concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40990, Oxygen, Dissolved **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	12032
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40990, Oxygen, Dissolved **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	12031
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40990, Oxygen, Dissolved **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	12046
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41029 Region 3

Llagas Creek (above Chesbro Reservoir)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 46 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 46 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41029, Specific Conductivity **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	10370
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41029, Specific Conductivity **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17528
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	38
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 0 of 38 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [LL-CRA Llagas Creek Above Chesbro Res.]
Temporal Representation:	Data was collected over the time period 11/12/2002-8/4/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42248 Region 3

Llagas Creek (above Chesbro Reservoir)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Five of the 32 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 32 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42248, Turbidity **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	12049
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42248, Turbidity **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17507
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 4 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 10/12/2005-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42248, Turbidity **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	12065
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as

	follows: 1 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42248, Turbidity **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17506
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 4 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 10/12/2005-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41014 Region 3

Llagas Creek (above Chesbro Reservoir)

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Twenty-five of the 93 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this supports rejection of the null hypothesis.

In addition, A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Llagas Creek as having "Definite run or population" and specifically cites the following from a draft report (DFG 2002): the perennial headwaters of Llagas Creek upstream from the reservoir contain a healthy population of resident rainbow trout. Therefore this temperature guideline is relevant to the waterbody.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-five of the 93 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this supports rejection of the null hypothesis and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41014, Temperature, water Region 3

Llagas Creek (above Chesbro Reservoir)

LOE ID:	12048
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-1/7/1999. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41014, Temperature, water **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17398
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	82
Number of Exceedances:	22

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 22 of 82 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42062 Region 3

Llagas Creek (above Chesbro Reservoir)

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Twelve lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Twenty-one of 93 samples exceed the Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation objectives and this supports rejection of the null hypothesis. Thirteen of 93 samples exceed the Agricultural Supply water quality objective and 11 of 93 samples exceed the Cold and Warm Freshwater Habitat water quality objectives. These beneficial uses are fully supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d)

list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-one of 93 samples exceed the Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation objectives and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17538
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	83
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 10 of 83 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	10371
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	10130
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	10129
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	10128
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	10127
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	10418
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 1 monitoring site [305CHE-Llagas Creek at Chesbro Reservoir]
Temporal Representation:	Data was collected over the time period 2/10/1998-12/2/1998. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17537
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	83
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 20 of 83 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-1/17/2007.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17536
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	83
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 20 of 83 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17535
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	83
Number of Exceedances:	20

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 20 of 83 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	17534
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	83
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 10 of 83 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2

	monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42062, pH **Region 3**

Llagas Creek (above Chesbro Reservoir)

LOE ID:	16925
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	83
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Llagas Creek (above Chesbro Reservoir) to determine beneficial use support and results are as follows: 12 of 83 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Llagas Creek (above Chesbro Reservoir) was collected at 2 monitoring sites [LL-CRA Llagas Creek Above Chesbro Res., LL-RCD - Llagas Creek at Rancho Canada Del Oro]
Temporal Representation:	Data was collected over the time period 11/12/2002-1/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Watsonville Slough**
Water Body ID: **CAR3051003019981209150043**
Water Body Type: **River & Stream**

DECISION ID **34296** **Region 3**
Watsonville Slough

Pollutant: **Pesticides**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This decision for pesticides was made prior to 2006 and the supporting data and other information are not held in an assessment database. The historic administrative record does not include specific data for this decision.

This decision for the general category of 'Pesticides' is being replaced by individual decisions for each of the pesticides for which there are data. This water segment is being assessed for a full suite of currently applied pesticides such as OP and pyrethroid pesticides. Those individual decisions replace this generic decision for pesticides.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision for the general category of 'Pesticides' is being replaced by individual decisions for each of the pesticides for which there are data.

Line of Evidence (LOE) for Decision ID 34296, Pesticides **Region 3**
Watsonville Slough

LOE ID: 4021

Pollutant: Pesticides
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: Placeholder reference pre-2006 303(d)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 41903 Region 3

Watsonville Slough

Pollutant:	**Pathogens**
Final Listing Decision:	**Delist from 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Reason for Delisting:	Change from general pollutant to specific pollutant listing (e.g. metals to copper)
TMDL Name:	Watsonville Slough Pathogen
TMDL Project Code:	35
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision for the general category of 'Pathogens' is being replaced by individual decisions for each of the Indicator Bacteria for which there are data, such as E. coli and fecal coliform. Those individual decisions replace this generic decision. This decision for 'Pathogens' was made prior to 2006 and the supporting data and other information are not held in an assessment database. The historic administrative record does not include specific data for this decision. Furthermore, newer data for individual pollutants are available and will be assessed under individual decisions. Those decisions will replace this decision for the generic pollutant category 'Pathogens'. This conclusion is based on the staff findings that: 1. The data used for the original decision are not available and therefore do not satisfy the data quality requirements of section 6.1.4 of the Policy. 2. The data used for the original decision are not available and therefore do not satisfy the data quantity requirements of section 6.1.5 of the Policy. 3. No data is available to assess the status of this water body for this generic pollutant and newer data for individual pollutants under this general category are available and are assessed in separate decisions. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available for this general category
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision for the general category of 'Pathogens' is being replaced by individual decisions for each of the fecal indicator bacteria for which there are data.

Line of Evidence (LOE) for Decision ID 41903, Pathogens Region 3

Watsonville Slough

LOE ID:	1857

Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID	36957	Region 3
Watsonville Slough		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Three water quality objectives are assessed. Twenty-two of the 28 samples exceeded the water quality objectives for dissolved oxygen in Estuarine and Fish Spawning Habitats, and 401 of the 1014 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats, therefore none of these uses are not supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Estuarine, Fish Spawning, and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-two of the 28 samples exceeded the water quality objectives for dissolved oxygen in Estuarine and Fish Spawning Habitats, and 401 of the 1014 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. All of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	18120
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Watsonville Slough to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	48895
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	12019
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	13690
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]

Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	12020
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 10 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	17855

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	868
Number of Exceedances:	324
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Slough to determine beneficial use support and results are as follows: 324 of 868 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 8 monitoring sites [WS-LEE - Watsonville Slough at Lee, WS-SAR - Watsonville Slough at San Andreas Road, WS-SHA - Watsonville Slough above Shell Road, WS-SHB - Watsonville Slough below Shell Road, WS-ERR - Watsonville Slough at Errington, Krausse confluence, Krausse ditch w/ willows, Krausse open water]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	18155
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Watsonville Slough to determine beneficial use support and results are as follows: 27 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/13/2004-11/12/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	48186
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input]
Temporal Representation:	Data was collected over the time period 1/7/2008 5:00:00 PM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water

Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	48185
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input]
Temporal Representation:	Data was collected over the time period 1/7/2008 5:00:00 PM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	48184
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 7 samples

	exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input]
Temporal Representation:	Data was collected over the time period 1/7/2008 5:00:00 PM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	13691
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring

	Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	48908
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	48907
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Estuarine Habitat
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	48906
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 20 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	48896
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	21
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	17895
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Slough to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 2 monitoring sites [WS-LEE - Watsonville Slough at Lee, WS-SHB - Watsonville Slough below Shell Road]
Temporal Representation:	Data was collected over the time period 10/5/2004-2/21/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	58962
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Sixteen of 34 samples exceeded the objective.
Data Reference:	City of Watsonville Restoration Project Water Quality Data, Aug. 2004-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Samples were collected from Site 2. Site 1 data was omitted because it has effluent data only.
Temporal Representation:	Samples were collected once in 2004 and approximately once every other month between January 2005 to June 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for the Manabe-Burgstrom Area Slough Restoration Project. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36957, Oxygen, Dissolved **Region 3**

Watsonville Slough

LOE ID:	58961
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Two of 15 samples exceeded the objective.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Salsipuedes Creek at E Lake Ave Bridge.
Temporal Representation:	Samples were collected approximately once a month from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

DECISION ID **38573** **Region 3**

Watsonville Slough

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. One-hundred-ninety-nine of the 284 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One-hundred-ninety-nine of the 284 samples exceed the evaluation guideline for Warm Freshwater Habitat and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38573, Turbidity **Region 3**

Watsonville Slough

LOE ID:	17542
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	156
Number of Exceedances:	143
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Slough to determine beneficial use support and results are as follows: 143 of 156 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 5 monitoring sites [WS-LEE - Watsonville Slough at Lee, WS-SAR - Watsonville Slough at San Andreas Road,

	WS-SHB - Watsonville Slough below Shell Road, WS-SHA - Watsonville Slough above Shell Road, WS-ERR - Watsonville Slough at Errington]
Temporal Representation:	Data was collected over the time period 9/21/2005-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38573, Turbidity **Region 3**

Watsonville Slough

LOE ID:	48861
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	22
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 8 of 22 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38573, Turbidity **Region 3**

Watsonville Slough

LOE ID:	13698
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	93
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Watsonville Slough to determine beneficial use support and results are as follows: 39 of 93 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 6 monitoring sites [Shell Rd at pump station, Lee Rd, San Andreas Rd, Pajaro Dunes Colony near confluence with Pajaro R, Errington Rd, Harkins Slough Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38573, Turbidity **Region 3**

Watsonville Slough

LOE ID:	12021
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 7/21/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38573, Turbidity **Region 3**

Watsonville Slough

LOE ID:	13727
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 54001 Region 3
Watsonville Slough

Pollutant:	**Alachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 9 samples exceed the evaluation guidelines for protecting aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54001, Alachlor Region 3
Watsonville Slough

LOE ID:	94159
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	36360	Region 3
Watsonville Slough		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces unionized ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Three LOEs summarize unionized ammonia data in which zero of the 26 samples exceed the water quality objective for unionized ammonia set to protect Warm Freshwater Habitat. Three LOEs also summarize unionized ammonia data in which 1 of the 111 samples exceed the water quality objective for unionized ammonia set to protect Fish Spawning habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 26 samples exceed the water quality objective for unionized ammonia for Warm

Freshwater Habitat and 1 of the 111 samples exceed the water quality objective for Fish Spawning Habitat. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36360, Ammonia **Region 3**

Watsonville Slough

LOE ID:	58977
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Fish Spawning
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 33 samples exceed the water quality objective for Un-ionized Ammonia (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The Un-ionized ammonia (as N) values were then established and compared to the Un-ionized Ammonia (as N) at 0.025 mg/L in the RB3 Basin Plan.
Data Reference:	City of Watsonville Restoration Project Water Quality Data, Aug. 2004-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Region (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters for toxicity.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at site 2 located at the tip of the peninsula about 300 ft E-NE of the Nature Center. Samples from site 1 are not representative of the water body as a whole and was not counted. Site 1 is cut off from the slough by soil filled-in from construction projects and samples are heavily influenced from effluent from a nearby storm drain.
Temporal Representation:	Pre-restoration samples were collected from January 2005 to July 2005. Post-restoration samples were collected bi-monthly from October 2005 to June 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for the Upper Watsonville Slough Restoration Project. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36360, Ammonia **Region 3**

Watsonville Slough

LOE ID:	58978

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Fish Spawning
Number of Samples:	64
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	1 of 64 samples exceed the water quality objective for Un-ionized Ammonia (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The Un-ionized ammonia (as N) values were then established and compared to the Un-ionized Ammonia (as N) at 0.025 mg/L in the RB3 Basin Plan.
Data Reference:	City of Watsonville Restoration Project Water Quality Data, Aug. 2004-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Region (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters for toxicity.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at three sites: 1) at mid-point, south side of road/trail that crosses Watsonville Slough from Ford St., 2) about 30ft. east of Ohlone Parkway, and 3) just east of Lee Rd.
Temporal Representation:	Pre-restoration samples were collected monthly from May 2006 to August 2006. Post-restoration samples were collected bi-monthly from April 2007 to June 2010.
Environmental Conditions:	No samples were collected from the second and third sites during 8/27/2007 because of restoration activities. No samples were collected from the third site during 10/25/2007 because of restoration activities.
QAPP Information:	Data were collected by the City of Watsonville staff for the Manabe-Burgstrom Area Slough Restoration Project. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36360, Ammonia **Region 3**

Watsonville Slough

LOE ID:	58976
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Fish Spawning
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 14 samples exceed the water quality objective for Un-ionized Ammonia (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The Un-ionized ammonia (as N) values were then established and compared to the Un-ionized Ammonia (as N) at 0.025 mg/L in the RB3 Basin Plan.

Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Region (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters for toxicity.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Watsonville Slough @ Ohlone Parkway Bridge.
Temporal Representation:	Samples were collected monthly from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36360, Ammonia **Region 3**

Watsonville Slough

LOE ID:	13674
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-3/28/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36360, Ammonia **Region 3**

Watsonville Slough

LOE ID:	9404
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36360, Ammonia **Region 3**

Watsonville Slough

LOE ID:	48892
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**51718**	**Region 3**
Watsonville Slough		

Pollutant:	**Atrazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51718, Atrazine **Region 3**

Watsonville Slough

LOE ID:	94160
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Atrazine is 43 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **51642** **Region 3**

Watsonville Slough

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant; two LOEs summarize water and two LOEs summarize sediment. Zero out of nine water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of twelve sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51642, Bifenthrin **Region 3**

Watsonville Slough

LOE ID:	94162
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for BIFENTHRIN.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 51642, Bifenthrin **Region 3**

Watsonville Slough

LOE ID:	58986
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50

	0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51642, Bifenthrin **Region 3**

Watsonville Slough

LOE ID:	94035
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51642, Bifenthrin **Region 3**

Watsonville Slough

LOE ID:	94161
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for BIFENTHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The genus mean acute value for a mysid (Mysidopsis bahia) of 0.0034 ug/L (DFG 00-6, 2000).
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response, Administrative Report 00-6
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **51724** **Region 3**

Watsonville Slough

Pollutant:	**Butylate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and

Conclusion:	3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51724, Butylate **Region 3**

Watsonville Slough

LOE ID:	94163
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS and SWAMP QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54602 Region 3

Watsonville Slough

Pollutant:	**Carbaryl**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline used to interpret the narrative water quality objective for the protection of aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54602, Carbaryl Region 3

Watsonville Slough

LOE ID:	94164
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54191**	**Region 3**
Watsonville Slough		

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54191, Carbofuran **Region 3**

Watsonville Slough

LOE ID:	94165
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **37860** **Region 3**

Watsonville Slough

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Two of the 37 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 37 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37860, Chlorophyll-a — Region 3

Watsonville Slough

LOE ID:	9405
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37860, Chlorophyll-a **Region 3**

Watsonville Slough

LOE ID:	13689
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37860, Chlorophyll-a **Region 3**

Watsonville Slough

LOE ID:	48893
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**42486**	**Region 3**
Watsonville Slough		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine sediment samples exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). One of fourteen water samples exceed the evaluation guideline for warm freshwater habitat and one of nine water samples exceed the evaluation guideline for estuarine habitat uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if a beneficial uses is not supported using table 3.1. Therefore, the support use rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine sediment samples exceed the aquatic life evaluation guideline, one of fourteen water samples exceed the evaluation guideline for warm freshwater habitat, and one of nine water samples exceed the evaluation guideline for estuarine habitat uses. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42486, Chlorpyrifos — Region 3

Watsonville Slough

LOE ID:	16007
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA001 - Watsonville Slough above pump station at San Andreas]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42486, Chlorpyrifos — Region 3

Watsonville Slough

LOE ID:	16330
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA001 - Watsonville Slough above pump station at San Andreas]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42486, Chlorpyrifos **Region 3**

Watsonville Slough

LOE ID:	18601
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06)

	Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA_DHS - Watsonville Slough]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42486, Chlorpyrifos **Region 3**

Watsonville Slough

LOE ID:	94036
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl

butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.

Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 42486, Chlorpyrifos **Region 3**

Watsonville Slough

LOE ID:	94167
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42486, Chlorpyrifos **Region 3**

Watsonville Slough

LOE ID:	94166
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The saltwater criterion continuous concentration to protect aquatic organisms is 0.009 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**51643**	**Region 3**
Watsonville Slough		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the fourteen sediment samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the fourteen sediment samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51643, Cyfluthrin **Region 3**

Watsonville Slough

LOE ID:	94063
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51643, Cyfluthrin **Region 3**

Watsonville Slough

LOE ID:	58857
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **51644** **Region 3**

Watsonville Slough

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline for aquatic life protection. Zero of the twelve sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51644, Cyhalothrin, Lambda **Region 3**

Watsonville Slough

LOE ID:	58861
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51644, Cyhalothrin, Lambda **Region 3**

Watsonville Slough

LOE ID:	94168
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cyhalothrin, Lambda.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [

	305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 51644, Cyhalothrin, Lambda **Region 3**

Watsonville Slough

LOE ID:	94037
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cyhalothrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **51646** **Region 3**

Watsonville Slough

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Zero of the nine sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51646, Cypermethrin **Region 3**

Watsonville Slough

LOE ID:	94169
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CYPERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The genus mean acute value for a grass shrimp (Palaemonetes pugio) of 0.016 ug/L (DFG 00-6, 2000).
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response, Administrative Report 00-6
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 51646, Cypermethrin **Region 3**

Watsonville Slough

LOE ID:	94038
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cypermethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in

sediments. Environmental Toxicology and Chemistry 21:9-15

Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51646, Cypermethrin **Region 3**

Watsonville Slough

LOE ID:	94170
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CYPERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54114** **Region 3**

Watsonville Slough

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16 samples exceed the evaluation guideline for aquatic life uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 16 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54114, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Watsonville Slough

LOE ID:	58868
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54114, DDD (Dichlorodiphenyldichloroethane) Region 3

Watsonville Slough

LOE ID:	94049
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54114, DDD (Dichlorodiphenyldichloroethane) Region 3

Watsonville Slough

LOE ID:	58869
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDD. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **54029** **Region 3**

Watsonville Slough

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of the 16

sediment samples and aero of the nine water samples exceed the evaluation guidelines for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 sediment samples and aero of the nine water samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54029, DDT (Dichlorodiphenyltrichloroethane) Region 3

Watsonville Slough

LOE ID:	94047
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54029, DDT (Dichlorodiphenyltrichloroethane) Region 3

Watsonville Slough

LOE ID:	58880
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54029, DDT (Dichlorodiphenyltrichloroethane) Region 3

Watsonville Slough

LOE ID:	58989
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54029, DDT (Dichlorodiphenyltrichloroethane) Region 3

Watsonville Slough

LOE ID:	58876
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54029, DDT (Dichlorodiphenyltrichloroethane) Region 3

Watsonville Slough

LOE ID:	58983
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54029, DDT (Dichlorodiphenyltrichloroethane) Region 3

Watsonville Slough

LOE ID:	94183
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for p p' DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54029, DDT (Dichlorodiphenyltrichloroethane) Region 3

Watsonville Slough

LOE ID:	94182
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for p p' DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in saline water is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

toxic pollutants for the State of California. 7/1/2011 Edition

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation: Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:
QAPP Information: USGS QAPP
QAPP Information Reference(s): 2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54029, DDT (Dichlorodiphenyltrichloroethane) Region 3
Watsonville Slough

LOE ID: 94083

Pollutant: DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup: Pollutant-Sediment
Matrix: Sediment
Fraction: Total

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 11
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for DDT.
Data Reference: Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline: In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference: Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation: Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation: Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:
QAPP Information: USGS QAPP
QAPP Information Reference(s): Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 51647 Region 3
Watsonville Slough

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Zero of the twelve sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51647, Deltamethrin **Region 3**

Watsonville Slough

LOE ID:	94040
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51647, Deltamethrin **Region 3**

Watsonville Slough

LOE ID:	58882
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).

Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51647, Deltamethrin **Region 3**

Watsonville Slough

LOE ID:	94171
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **42590** **Region 3**

Watsonville Slough

Pollutant: **Diazinon**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the twelve sediment samples exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). One of fourteen water samples exceed the evaluation guideline for warm freshwater habitat and one of nine water samples exceed the evaluation guideline for estuarine habitat uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if a beneficial uses is not supported using table 3.1. Therefore, the support use rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the twelve sediment samples exceed the aquatic life evaluation guideline, one of fourteen water samples exceed the evaluation guideline for warm freshwater habitat, and one of nine water samples exceed the evaluation guideline for estuarine habitat uses. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42590, Diazinon **Region 3**

Watsonville Slough

LOE ID:	94041
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 42590, Diazinon **Region 3**

Watsonville Slough

LOE ID:	94173
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier

et al., 2005).

Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42590, Diazinon **Region 3**

Watsonville Slough

LOE ID:	94172
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 42590, Diazinon **Region 3**

Watsonville Slough

LOE ID:	58883

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 42590, Diazinon **Region 3**

Watsonville Slough

LOE ID:	16753
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA001 - Watsonville Slough above pump station at San Andreas]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42590, Diazinon **Region 3**

Watsonville Slough

LOE ID:	16659
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson

	(2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA001 - Watsonville Slough above pump station at San Andreas]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42590, Diazinon **Region 3**

Watsonville Slough

LOE ID:	18695
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA_DHS - Watsonville Slough]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID	51648	Region 3
Watsonville Slough		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline and zero of the twelve sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine water samples exceed the evaluation guideline and zero of the twelve sediment samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51648, Esfenvalerate/Fenvalerate	**Region 3**
Watsonville Slough	

LOE ID:	58906
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51648, Esfenvalerate/Fenvalerate **Region 3**

Watsonville Slough

LOE ID:	94174
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 51648, Esfenvalerate/Fenvalerate **Region 3**

Watsonville Slough

LOE ID:	94042
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	51649	Region 3
Watsonville Slough		

Pollutant:	**Ethalfluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51649, Ethalfluralin	**Region 3**
Watsonville Slough	

LOE ID:	94175
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ETHALFLURALIN.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54004**	**Region 3**
Watsonville Slough		

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples and zero of the twelve sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine water samples and zero of the twelve sediment samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54004, Fenpropathrin **Region 3**

Watsonville Slough

LOE ID:	58916
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54004, Fenpropathrin **Region 3**

Watsonville Slough

LOE ID:	94048
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54004, Fenpropathrin **Region 3**

Watsonville Slough

LOE ID:	94176
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	54005	Region 3
Watsonville Slough		

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the twelve samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the twelve samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54005, Fipronil **Region 3**

Watsonville Slough

LOE ID:	94043
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fipronil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54005, Fipronil **Region 3**

Watsonville Slough

LOE ID:	58918
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**54006**	**Region 3**
Watsonville Slough		

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the twelve sediment samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the twelve samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54006, Fipronil Sulfide **Region 3**

Watsonville Slough

LOE ID:	94044
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fipronil sulfide.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54006, Fipronil Sulfide **Region 3**

Watsonville Slough

LOE ID:	58919
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil sulfide.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **54007** **Region 3**

Watsonville Slough

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing

status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the twelve sediment samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the twelve samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54007, Fipronil Sulfone **Region 3**

Watsonville Slough

LOE ID:	94045
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of

	0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54007, Fipronil Sulfone **Region 3**

Watsonville Slough

LOE ID:	58931
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 54009 Region 3

Watsonville Slough

Pollutant:	**Hexazinone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54009, Hexazinone — Region 3

Watsonville Slough

LOE ID:	94177
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54011 Region 3

Watsonville Slough

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54011, Methidathion Region 3

Watsonville Slough

LOE ID:	94179
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54012**	**Region 3**
Watsonville Slough		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline for aquatic life uses. Zero of the twelve sediment samples exceed the evaluation guideline for aquatic life uses. This sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine water samples exceed the evaluation guideline for aquatic life uses and zero of the twelve sediment samples exceed the evaluation guideline for aquatic life uses. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54012, Methyl Parathion **Region 3**

Watsonville Slough

LOE ID:	94184
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.

Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54012, Methyl Parathion **Region 3**

Watsonville Slough

LOE ID:	58949
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54012, Methyl Parathion **Region 3**

Watsonville Slough

LOE ID:	94046

Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**54014**	**Region 3**
Watsonville Slough		

Pollutant:	**Molinate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable

beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54014, Molinate **Region 3**

Watsonville Slough

LOE ID:	94180
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [

	305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	54015	Region 3
Watsonville Slough		

Pollutant:	**Napropamide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of nine water samples exceeded the evaluation guideline for the aquatic life beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the beneficial use rating is set to 'insufficient information.' Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of nine water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54015, Napropamide	**Region 3**
Watsonville Slough	

LOE ID:	94181
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**51650**	**Region 3**
Watsonville Slough		

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. Zero of the twelve sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51650, Permethrin, total **Region 3**

Watsonville Slough

LOE ID:	58963
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51650, Permethrin, total **Region 3**

Watsonville Slough

LOE ID:	94107
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51650, Permethrin, total **Region 3**

Watsonville Slough

LOE ID:	94185
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for

	PERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54016**	**Region 3**
Watsonville Slough		

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54016, Phosmet **Region 3**

Watsonville Slough

LOE ID:	94186
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54018** **Region 3**

Watsonville Slough

Pollutant:	**Prometryn**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for the protection of aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54018, Prometryn **Region 3**

Watsonville Slough

LOE ID:	94187
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID 54019 Region 3

Watsonville Slough

Pollutant:	**Propanil (DCPA mono- and di-acid degrad)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54019, Propanil (DCPA mono- and di-acid degrad) Region 3

Watsonville Slough

LOE ID:	94188
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54020**	**Region 3**
Watsonville Slough		

Pollutant:	**Propiconazole**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54020, Propiconazole **Region 3**

Watsonville Slough

LOE ID:	94189
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54021** **Region 3**

Watsonville Slough

Pollutant: **Simazine**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54021, Simazine **Region 3**

Watsonville Slough

LOE ID:	94191
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54022**	**Region 3**
Watsonville Slough		

Pollutant:	**Thiobencarb/Bolero**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for the protection of aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54022, Thiobencarb/Bolero	**Region 3**
Watsonville Slough	

LOE ID:	94192

Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54024**	**Region 3**
Watsonville Slough		

Pollutant:	**Trifluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for the protection of aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54024, Trifluralin **Region 3**

Watsonville Slough

LOE ID:	94193
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	37007	Region 3
Watsonville Slough		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-six lines of evidence are available in the administrative record to assess this pollutant. Three beneficial uses are assessed. One-hundred-six of the 1149 samples exceed the water quality objective for Warm Freshwater Habitat and 97 of the 1100 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One-hundred-six of the 1149 samples exceed the water quality objective for Warm Freshwater Habitat and 97 of the 1100 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37007, pH	**Region 3**
Watsonville Slough	

LOE ID:	58969
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Thirteen of 34 samples exceeded the objective.
Data Reference:	City of Watsonville Restoration Project Water Quality Data, Aug. 2004-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0, nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Site 2. Site 1 data was omitted because it has effluent data only.
Temporal Representation:	Samples were collected once in 2004 and approximately once every other month between January 2005 to June 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for the Manabe-Burgstrom Area Slough Restoration Project. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	58968
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of 15 samples exceeded the objective.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0, nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Watsonville Slough at Ohlone Parkway bridge.
Temporal Representation:	Samples were collected approximately once a month from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	18897
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	18914
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	18915
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	17612
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	908
Number of Exceedances:	84
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Slough to determine beneficial use support and results are as follows: 84 of 908 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 8 monitoring sites [WS-LEE - Watsonville Slough at Lee, WS-SAR - Watsonville Slough at San Andreas Road, WS-SHA - Watsonville Slough above Shell Road, WS-SHB - Watsonville Slough below Shell Road, WS-ERR - Watsonville Slough at Errington, Krausse confluence, Krausse ditch w/ willows, Krausse open water]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	17613
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	908
Number of Exceedances:	84
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Slough to determine beneficial use support and results are as follows: 84 of 908 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A

	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 8 monitoring sites [WS-LEE - Watsonville Slough at Lee, WS-SAR - Watsonville Slough at San Andreas Road, WS-SHA - Watsonville Slough above Shell Road, WS-SHB - Watsonville Slough below Shell Road, WS-ERR - Watsonville Slough at Errington, Krausse confluence, Krausse ditch w/ willows, Krausse open water]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	17614
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	908
Number of Exceedances:	67
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Watsonville Slough to determine beneficial use support and results are as follows: 67 of 908 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 8 monitoring sites [WS-LEE - Watsonville Slough at Lee, WS-SAR - Watsonville Slough at San Andreas Road, WS-SHA - Watsonville Slough above Shell Road, WS-SHB - Watsonville Slough below Shell Road, WS-ERR - Watsonville Slough at Errington, Krausse confluence, Krausse ditch

	w/ willows, Krausse open water]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	19148
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	43
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/13/2004-11/12/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	19149
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	43
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/13/2004-11/12/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	19150
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Watsonville Slough to determine beneficial use support and results are as follows: 5 of 43 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not

	be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/13/2004-11/12/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	48909
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	48910
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	48911
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 2/14/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	48187
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input]
Temporal Representation:	Data was collected over the time period 1/7/2008 5:00:00 PM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	48188

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input]
Temporal Representation:	Data was collected over the time period 1/7/2008 5:00:00 PM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	13853
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	90
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Watsonville Slough to determine beneficial use support and results are as follows: 8 of 90 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 6 monitoring sites [Shell Rd at pump station, Pajaro Dunes Colony near confluence with Pajaro R, Lee Rd, Errington Rd, San Andreas Rd, Harkins Slough Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	13692
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	13726
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	13725
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	13852
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	90
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Watsonville Slough to determine beneficial use support and results are as follows: 9 of 90 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 6 monitoring sites [Shell Rd at pump station, Pajaro Dunes Colony near confluence with Pajaro R, Lee Rd, Errington Rd, San Andreas Rd, Harkins Slough Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	13851
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Watsonville Slough to determine beneficial use support and results are as follows: 9 of 90 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 6 monitoring sites [Shell Rd at pump station, Pajaro Dunes Colony near confluence with Pajaro R, Lee Rd, Errington Rd, San Andreas Rd, Harkins Slough Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-3/1/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	11107
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	48189
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 3 of 9 samples

	exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input]
Temporal Representation:	Data was collected over the time period 1/7/2008 5:00:00 PM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	11108
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37007, pH **Region 3**

Watsonville Slough

LOE ID:	11109
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **54117** **Region 3**

Watsonville Slough

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown

Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. Five lines of evidence are available in the administrative record to assess this pollutant. Six of the 16 samples exceed the evaluation guideline for aquatic life uses and three of these samples also resulted in a toxic effect to the standard test organisms. This water segment is on the 303(d) List for sediment toxicity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 16 samples exceed the evaluation guideline for aquatic life uses and three of these samples also resulted in a toxic effect to the standard test organisms. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 54117, DDE (Dichlorodiphenyldichloroethylene) Region 3

Watsonville Slough

LOE ID:	58873
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for DDE. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-2/16/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54117, DDE (Dichlorodiphenyldichloroethylene) Region 3

Watsonville Slough

LOE ID:	58870
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 7/2/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54117, DDE (Dichlorodiphenyldichloroethylene) Region 3

Watsonville Slough

LOE ID:	58991
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected at three different stations to evaluate sediment toxicity. Seven of the nine samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed at 305WAB (7/2/08).
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305WAB - Watsonville Slough below Beach Street Input.
Temporal Representation:	The samples were collected in May, July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 54117, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Watsonville Slough

LOE ID:	94050
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial

	use support and results are as follows: 4 of 11 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [Pajaro River Estuary-Sediment site 3 - 305PJESD3, Pajaro River Estuary-Sediment site 4 - 305PJESD4, 305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54117, DDE (Dichlorodiphenyldichloroethylene) Region 3

Watsonville Slough

LOE ID:	58843
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control

	sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305WSA-Watsonville Slough at San Andreas Road.
Temporal Representation:	The samples were collected annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**50173**	**Region 3**
Watsonville Slough		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This is a new/revised decision to replace the decisions made for the generic pollutant category of 'Pathogen'. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Seventy-two of 200 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 4 of 89 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Seventy-two of 200 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli)	**Region 3**
Watsonville Slough	

LOE ID:	58896
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	64
Number of Exceedances:	18
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Eighteen of the 64 samples exceeded the E. coli objective of 235 MPN/100mL.
Data Reference:	City of Watsonville Restoration Project Water Quality Data, Aug. 2004-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL. USEPA Ambient Water Quality Criteria for Bacteria -1986
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected from the Manabe-Burgstrom Area. Site 1, Watsonville Slough at mid-point, south side of road/trail that crosses Watsonville Slough from Ford St., Site 2, Watsonville Slough about 30ft east of Ohlone Parkway and site 3, Watsonville Slough just east of Lee Rd. CAR3051003019981209150043
Temporal Representation:	Samples were collected every monthly from May to August 2006 before the restoration and every two months from April 2007 to June 2010 after the restoration.
Environmental Conditions:	Manabe-Burgstrom Area is a restoration site. Samples were collected pre-restoration in 2006 and post restoration in 2007-2010.
QAPP Information:	No QAPP provided with data. Data quality ok. City of Watsonville receiving waters.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) **Region 3**

Watsonville Slough

LOE ID:	58904
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 32 samples exceeded the E. coli Objective of 235 MPN/100mL.
Data Reference:	City of Watsonville Restoration Project Water Quality Data, Aug. 2004-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL. USEPA Ambient Water Quality Criteria for Bacteria -1986
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected from site 2, Watsonville Slough at the tip of the peninsula about 300 ft E-NE of Nature Center. CAR3051003019981209150043
Temporal Representation:	Samples were collected every two months from August 2004 to July 2005 before the restoration and every two months from October 2005 to June 2010 after the restoration.
Environmental Conditions:	Upper Watsonville Slough is a restoration site. Samples were collected pre-restoration in 2004 and 2005 and post restoration in 2005-2010.
QAPP Information:	No QAPP provided with data. Data quality ok. City of Watsonville receiving waters.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) Region 3

Watsonville Slough

LOE ID:	58895
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two of the 15 samples exceeded theE. coli Objective of 235 MPN/100mL.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL. USEPA Ambient Water Quality Criteria for Bacteria -1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected at Watsonville Slough @ Ohlone Pkwy Bridge. CAR3051003019981209150043
Temporal Representation:	Samples were collected monthly from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	No QAPP provided with data. Data quality ok. City of Watsonville receiving waters.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) Region 3

Watsonville Slough

LOE ID:	11091
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) Region 3

Watsonville Slough

LOE ID:	18492
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Watsonville Slough to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as

	stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 2 monitoring sites [305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-21 - Watsonville Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) **Region 3**

Watsonville Slough

LOE ID:	18493
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 2 monitoring sites [305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-21 - Watsonville Slough at Harkins Slough Road]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) **Region 3**

Watsonville Slough

LOE ID:	13640
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 57 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 5 monitoring sites [Shell Rd at pump station, Pajaro Dunes Colony near confluence with Pajaro R, Lee Rd, San Andreas Rd, Harkins Slough Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) Region 3

Watsonville Slough

LOE ID:	18535
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Watsonville Slough to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) Region 3

Watsonville Slough

LOE ID:	13639
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	32
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Watsonville Slough to determine beneficial use support and results are as follows: 32 of 57 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 5 monitoring sites [Shell Rd at pump station, Pajaro Dunes Colony near confluence with Pajaro R, Lee Rd, San Andreas Rd, Harkins Slough Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) **Region 3**

Watsonville Slough

LOE ID:	18534
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Watsonville Slough to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 3 monitoring sites [305-WATSO-21 - Watsonville Slough at Harkins Slough Road, 305-WATSO-23 - Watsonville Slough at Palm Beach Rd., 305-WATSO-22 - Watsonville Slough at Pajaro Valley Water Management Agency Pump Station]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50173, Escherichia coli (E. coli) **Region 3**

Watsonville Slough

LOE ID:	11092
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**54010**	**Region 3**
Watsonville Slough		

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two out of nine water samples exceeded the evaluation guideline applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of nine water samples exceeded the evaluation guideline set to protect for aquatic life beneficial

uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 54010, Malathion **Region 3**

Watsonville Slough

LOE ID:	94178
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Watsonville Slough to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WAT-Watsonville Slough below Beach Street Input - 305WAB]
Temporal Representation:	Data was collected over the time period 1/7/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54027** **Region 3**

Watsonville Slough

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Eleven of the 15 samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). In addition, the following supporting evidence indicates existence of and high risk for eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). Supporting evidence based on measurements from the Watsonville Slough. 1. Dissolved oxygen for this water body ranged from 1 mg/L to 11.92 frequently exceeding (falling below) the Warm Freshwater Habitat objective of 5.0 mg/L. The dissolved oxygen upper screening level of 13.0 mg/L (R3 NNE Technical Report, 2010) was not exceeded but there is ample evidence of wide fluctuations in daily dissolved oxygen concentrations. This water body segment is on the CWA section 303(d) List for low dissolved oxygen. 2. The percent cover of floating algal mats ranged from 0-80% in the creek, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). In stream aquatic vegetation was at times more than 90% cover. 3. Water column chlorophyll a concentrations ranged from 0 to over 200 ug/L, frequently exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). However, the evaluation guideline used in the 303(d) assessment (40 ug/L) is not being exceeded at a frequency that would result in placement of this water segment-pollutant combination on the CWA section 303(d) List for chlorophyll a. Supporting evidence based on predicted values from the California Benthic Biomass Predictor Tool. 4. Using site-specific data from this water body, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging 2.42 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010). 5. Using site-specific data from this water body, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted algae biomass concentrations ranging from 56 Â– 141 mg/m2. This exceeds the CaliforniaÂ's Nutrient Numeric Endpoint (Creager, et al., 2006) warm water threshold values of 80 grams/m2 ash-free dry weight (AFDW) for algal density. 6. Using site-specific data from this water body, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 141 mg/m2. This do not exceed the CaliforniaÂ's Nutrient Numeric Endpoint (Creager, et al., 2006) warm water threshold values of 200 mg/m2 benthic chlorophyll a. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 15 samples exceed the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. In addition, there is supporting evidence which indicates existence of and high risk for eutrophication. Furthermore, this water body segment is on the 303(d) List due to low dissolved oxygen conditions. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 54027, Nitrate **Region 3**
Watsonville Slough

LOE ID:	48894
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Watsonville Slough to determine beneficial use support and results are as follows: 11 of 15 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSAxxx - Watsonville Slough upstream Harkins Slough]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **38370** **Region 3**
Watsonville Slough

Pollutant: **Toxicity**

Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and six additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in sediment samples. Four of the eight sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Four LOEs summarize water samples. Five water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twenty water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, twenty-five total samples are available to assess toxic effects in water samples. Five of the twenty-five water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 8 sediment samples and 5 of the 25 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	24702
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA001 - Watsonville Slough above pump station at San Andreas]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	24695
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than

	5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA001 - Watsonville Slough above pump station at San Andreas]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	24708
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	24709
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA001 - Watsonville Slough above pump station at San Andreas]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	24701
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected on a single day 5/19/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	24713
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	24714
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA001 - Watsonville Slough above pump station at San Andreas]
Temporal Representation:	Data was collected over the time period 1/12/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	24691
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Watsonville Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 2/21/2006-8/22/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	58992
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. Two of the ten samples exhibited significant toxicity. Three samples were tested using Hyalella azteca only, six samples were tested using Ceriodaphnia dubia only and one sample (collected on 10/14/09) was tested using two organisms, Hyalella azteca and Ceriodaphnia dubia. Statistically significant effects to Ceriodaphnia dubia were reported for the samples collected in February and October 2009. The October 2009 sample was also toxic to Hyalella azteca.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at 305WAB (AKA 305WAT) -Watsonville Slough below Beach Street Input. This location has two different station codes in this data set.
Temporal Representation:	The samples ere collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	58991
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected at three different stations to evaluate sediment toxicity. Seven of the nine samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were

	observed at 305WAB (7/2/08).
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305WAB - Watsonville Slough below Beach Street Input.
Temporal Representation:	The samples were collected in May, July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	58990
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Two of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas and total cell count (growth) of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The sample collected on 10/1/2008 exhibited significant toxicity to Ceriodaphnia dubia reproduction. The sample collected on 1/19/10 exhibited significant toxicity to Pimephales promelas growth. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305WSA-Watsonville Slough at San Andreas Road.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 38370, Toxicity **Region 3**

Watsonville Slough

LOE ID:	58843
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity to Hyalella azteca. The toxicity tests included growth and survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 305WSA-Watsonville Slough at San Andreas Road.
Temporal Representation:	The samples were collected annualy from April 2007 to April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

DECISION ID	50174	Region 3
Watsonville Slough		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Watsonville Slough Pathogen
TMDL Project Code:	35
Date TMDL Approved by USEPA:	07/19/2007
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. This is a new/revised decision to replace the decisions made for the generic pollutant category of 'Pathogen'.

This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Thirty of 69 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 6 of 69 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty of 69 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Watsonville Slough Pathogen TMDL has been approved by USEPA on 07/19/2007.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50174, Fecal Coliform	Region 3
Watsonville Slough	

LOE ID:	14056
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	26
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Watsonville Slough to determine beneficial use support and results are as follows: 26 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 5 monitoring sites [Shell Rd at pump station, Pajaro Dunes Colony near confluence with Pajaro R, Lee Rd, San Andreas Rd, Harkins Slough Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50174, Fecal Coliform **Region 3**

Watsonville Slough

LOE ID:	11089
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50174, Fecal Coliform **Region 3**

Watsonville Slough

LOE ID:	11088
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Watsonville Slough to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 1 monitoring site [305WSA-Watsonville Slough at San Andreas Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50174, Fecal Coliform **Region 3**

Watsonville Slough

LOE ID:	14057
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Watsonville Slough to determine beneficial use support and results are as follows: 5 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Watsonville Slough was collected at 5 monitoring sites [Shell Rd at pump station, Pajaro Dunes Colony near confluence with Pajaro R, Lee Rd, San Andreas Rd, Harkins Slough Rd]
Temporal Representation:	Data was collected over the time period 2/18/2003-12/9/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID **33952** **Region 3**

Watsonville Slough

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data are assessed. The decision has not changed .
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33952, Sedimentation/Siltation **Region 3**

Watsonville Slough

LOE ID:	1856
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	338
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Sediment concentration has been studied by many investigators. All available data was reviewed and summarized by (Hager, J. and F. Watson 2005). For suspended sediment concentration, 338 representative measurements are available. None of the measurements exceed the sediment threshold.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect surface waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Three spine stickleback occurs in the Slough and in studies no mortality was observed in a test to identify the lethal threshold for sediment at a concentration of 28,000 mg/L (LeGore and Des Voigne, 1973).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Samples were collected at least 13 stations throughout the slough system.
Temporal Representation:	Samples were collected between 1976 and 2004 during all seasons.
Environmental Conditions:	
QAPP Information:	Most of the data were collected under a Quality Assurance Project Plan prepared by Central Coast Watershed Studies, The Watershed Institute at California State University Monterey Bay.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33952, Sedimentation/Siltation **Region 3**

Watsonville Slough

LOE ID:	1855
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Narrative Description Data
Matrix:	Not Specified
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Long-term aggregation of sediments and reduction in aquatic habitat volume was not evident. Aquatic habitat volume appears to be increasing due to land subsidence associated with de-watering of the area for peat mining and agriculture in the early 1900s, ground water pumping, and possibly local seismic activity. Scientists re-surveyed an old road survey across Struve Slough and Watsonville Slough, and found evidence of subsidence on the order of 10 to 20 mm/year since 1952. Obtained sediment cores in the tidal marsh of lower Watsonville Slough dating back to the 1400s and they were analyzed using radiocarbon dating, pollen, and lead-210. The data suggested an anthropogenic increase in sedimentation surrounding the expansion of agriculture in the first half of the 1900s, but net sedimentation rates since about 1950 appear to have been lower than in pre-historic times. This is likely attributed to decreased sediment supply to the lower reaches resulting from subsidence and the construction of the tide gates in the 1940s (Hager, J. and F. Watson 2005).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect surface waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Most of the data were collected under a Quality Assurance Project Plan prepared by Central Coast Watershed Studies, The Watershed Institute at California State University Monterey Bay.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33952, Sedimentation/Siltation **Region 3**

Watsonville Slough

LOE ID:	1854
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Narrative Description Data
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Smothering of benthic habitat by sedimentation was not significantly evident, but was also difficult to study. A visual reconnaissance was conducted for signs of excessive recent sedimentation. Unequivocal smothering of habitat could only be documented photographically in small portions of the Watsonville Slough system. Other areas were either stable, contained coarse sediment, contained fine sediment in amounts that did not contradict the expectation of a natural system, were under water, or were not accessible

	(Hager, J. and F. Watson 2005).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect surface waters.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	Most of the data were collected under a Quality Assurance Project Plan prepared by Central Coast Watershed Studies, The Watershed Institute at California State University Monterey Bay.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pajaro River**
Water Body ID: **CAR3051003019980826115152**
Water Body Type: **River & Stream**

DECISION ID **33286** **Region 3**
Pajaro River

Pollutant: **Boron**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Forty-one of the 153 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-one of the 153 samples exceed the water quality objective for agricultural uses and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33286, Boron **Region 3**
Pajaro River

LOE ID: 50910

Pollutant: Boron
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Agricultural Supply

Number of Samples:	41
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 11 of 41 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33286, Boron **Region 3**

Pajaro River

LOE ID:	9302
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	60
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 7 of 60 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4

	(Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33286, Boron **Region 3**

Pajaro River

LOE ID:	9356
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 23 of 52 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **44581** **Region 3**

Pajaro River

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status but under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Two LOEs summarize chlordane concentrations in water samples. Five of the 9 samples exceed the evaluation guideline for drinking water but zero of the nine samples exceed the evaluation guideline for aquatic life protection. Two LOEs summarize chlordane concentrations in sediment samples. The single sediment sample did not exceed the evaluation guideline for aquatic life protection in sediment. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 9 samples exceed the evaluation guideline for drinking water and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44581, Chlordane **Region 3**

Pajaro River

LOE ID:	29993
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Five of 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for Chlordane is 0.00057 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44581, Chlordane **Region 3**

Pajaro River

LOE ID:	29971
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. None of the 9 samples exceed the Criteria Continuous Concentration.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for Chlordane is 0.0043 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44581, Chlordane **Region 3**

Pajaro River

LOE ID:	56571
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44581, Chlordane **Region 3**

Pajaro River

LOE ID:	56572
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

DECISION ID	41646	Region 3
Pajaro River		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Sixty-seven of the 94 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-seven of the 94 samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41646, Chloride	**Region 3**
Pajaro River	

LOE ID:	56574
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41646, Chloride **Region 3**

Pajaro River

LOE ID:	50911
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	31
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 31 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41646, Chloride **Region 3**

Pajaro River

LOE ID:	9357
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 35 of 52 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **43484** **Region 3**

Pajaro River

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Nine lines of evidence are available in the administrative record to assess pollutant. Eight of the 18 water samples exceed the evaluation guideline for drinking water uses. In addition, three of the 20 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life. This water segment is also on the 303(d) List due to sediment toxicity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 18 water samples exceed the evaluation guideline for drinking water uses and three of the 20 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life and these exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. in addition, this water segment is also on the 303(d) List due to sediment toxicity. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43484, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Pajaro River

LOE ID:	29980
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Eight of the 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for 4,4'-DDD is 0.00083 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).

Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43484, DDD (Dichlorodiphenyldichloroethane) Region 3

Pajaro River

LOE ID:	94065
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43484, DDD (Dichlorodiphenyldichloroethane) Region 3

Pajaro River

LOE ID:	94240
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for p p' DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00083 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 43484, DDD (Dichlorodiphenyldichloroethane) Region 3

Pajaro River

LOE ID:	94099
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43484, DDD (Dichlorodiphenyldichloroethane) Region 3

Pajaro River

LOE ID:	56663
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected at seven different stations to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed in samples colelcted from station 305THU on 7/2/08 and 10/29/08.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305THU - Pajaro River at Thurwachter.
Temporal Representation:	The samples were collected in May, July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 43484, DDD (Dichlorodiphenyldichloroethane) Region 3

Pajaro River

LOE ID:	56536
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: a total of 4 samples were collected but two samples collected on 2/25/2008 and 2/26/2008 were averaged. 1 of 3 temporally independent samples exceed the criterion for DDD. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43484, DDD (Dichlorodiphenyldichloroethane) Region 3

Pajaro River

LOE ID:	56527
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: a total of 4 samples were collected but two samples collected on 2/25/2008 and 2/26/2008 were averaged. 1 of 3 temporally independent samples exceed the criterion for DDD. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 43484, DDD (Dichlorodiphenyldichloroethane) Region 3

Pajaro River

LOE ID:	56528
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43484, DDD (Dichlorodiphenyldichloroethane) Region 3

Pajaro River

LOE ID:	56534
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41630	Region 3
Pajaro River		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must not be associated with toxicity to result in removal of the pollutant from the Section 303(d) list.

Six lines of evidence are available in the administrative record to assess this pollutant. Two LOEs summarize Dieldrin concentrations in water samples. Nine of nine samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use (i.e drinking water) but zero of the nine samples exceed the evaluation guideline for protection of aquatic life uses.

Four LOEs summarize Dieldrin concentrations in sediment samples. Zero of the two sediment samples exceed the evaluation guidelines for protection of aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of the nine water samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water

quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41630, Dieldrin **Region 3**

Pajaro River

LOE ID:	56794
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41630, Dieldrin **Region 3**

Pajaro River

LOE ID:	56795
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41630, Dieldrin **Region 3**

Pajaro River

LOE ID:	29972
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. None of the 9 samples exceed the Criteria Continuous Concentration.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for Dieldrin is 0.056 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41630, Dieldrin **Region 3**

Pajaro River

LOE ID:	16777
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-

	Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41630, Dieldrin **Region 3**

Pajaro River

LOE ID:	16776
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41630, Dieldrin **Region 3**

Pajaro River

LOE ID:	29991

Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. All 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for Dieldrin is 0.00014 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID	**41712**	**Region 3**
Pajaro River		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Thirteen lines of evidence are available in the administrative record to assess this pollutant. Forty-seven of 191 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 6 of 132 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-seven of 191 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	19865
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-3/15/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	10118
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	60
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 4 of 60 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	10408
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 14 of 60 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) Region 3

Pajaro River

LOE ID:	10992
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 6 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.

Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 1/24/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	10993
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 1/24/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	14013
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PAJ_CCL - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	14012
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental

Data Reference:	Assessment Program (R3_CCLEAN) data for Pajaro River to determine beneficial use support and results are as follows: 7 of 39 samples exceed the criterion for Escherichia coli. Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PAJ_CCL - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) Region 3

Pajaro River

LOE ID:	19880
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-3/15/2004.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	18310
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	18311
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	56665
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Three of the 4 samples exceeded theE. coli Objective of 235 MPN/100mL.
Data Reference:	City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL. USEPA Ambient Water Quality Criteria for Bacteria -1986
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected for storm water sampling wet/dry at Pajaro River Upstream and Pajaro River Downstream.

Temporal Representation:	The wet weather samples were collected in December 2008 and the dry weather samples collected in June 2009.
Environmental Conditions:	
QAPP Information:	No QAPP provided with data. Data quality ok. City of Watsonville receiving waters.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	56666
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Six of the 15 samples exceeded the E. coli Objective of 235 MPN/100mL.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL. USEPA Ambient Water Quality Criteria for Bacteria -1986
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected at Pajaro River at Union Pump Outfall. CAR3051003019980826115152
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	No QAPP provided with data. Data quality ok. City of Watsonville receiving waters.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41712, Escherichia coli (E. coli) **Region 3**

Pajaro River

LOE ID:	50933
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 11 of 40 samples exceed the

	criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41698**	**Region 3**
Pajaro River		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Forty lines of evidence are available in the administrative record to assess this pollutant. Three-hundred-thirty-two of the 1529 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 19 of the 91 samples exceeded the water quality objective for dissolved oxygen in Fish Spawning Habitat, therefore these uses are not supported. However, only 57 of the 1518 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and this uses is fully supported. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats, as well as Fish Spawning Habitat. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three-hundred-thirty-two of the 1529 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 19 of the 91 samples exceeded the water quality objective for

dissolved oxygen in Fish Spawning Habitat. These both exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	50923
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 12 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	50943
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 12 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	50942
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	50922
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 4 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	50937
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	41
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 4 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	56699
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Six of 15 samples exceeded the objective.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Cold Freshwater Habitat" must be greater than 7.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Samples were collected from Pajaro River at Union St Pump Outfall.
Temporal Representation: Samples were collected approximately once a month from May 2009 to July 2010.
Environmental Conditions:
QAPP Information: Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID: 56700

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Zero of 4 samples exceeded the objective.
Data Reference: City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the Pajaro River Downstream and Pajaro River Upstream stations.
Temporal Representation: Samples were collected once in 2008 and once in 2009.
Environmental Conditions:
QAPP Information: Data were collected by the City of Watsonville staff as part of stormwater sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID: 56689

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	56688
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	56698
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	48694
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 10 of 42 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	48695
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	42
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 10 of 42 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	48696
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 3 of 42 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	48697
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 24 of 42 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	48711
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 24 of 42 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	47898
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	47899
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	7
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 4 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	47900
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	19766
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	19767
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	18231
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	18232
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	17782
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1174
Number of Exceedances:	268
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 268 of 1174 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-21, PA-22, PA-ONF PA-23, PA-MNS - Pajaro River at Main, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	17783
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1174
Number of Exceedances:	46
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 46 of 1174 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-21, PA-22, PA-ONF PA-23, PA-MNS - Pajaro River at Main, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	13875
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 10 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	13876
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 10 of 10 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	13858
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 8 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	13859
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12147
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 23 of 58 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12148
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 23 of 58 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12145

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 11 of 58 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12146
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 58 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12104
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-

	Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12105
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12106

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12066
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	159
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 17 of 159 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12067
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	159
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 159 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12068
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	154
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 40 of 154 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12069
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	154
Number of Exceedances:	40
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 40 of 154 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41698, Oxygen, Dissolved **Region 3**

Pajaro River

LOE ID:	12103
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**43120**	**Region 3**
Pajaro River		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must not be associated with toxicity to result in removal of the pollutant from the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Three of nine water samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use (i.e. drinking water). Zero of the nine water samples exceed the evaluation guideline for protection of aquatic life uses. Zero of the one sediment samples exceed the evaluation guidelines for protection of aquatic life uses. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient

information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the nine water samples exceed the evaluation guideline for protection of the Municipal and Domestic Supply use and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43120, PCBs (Polychlorinated biphenyls) **Region 3**

Pajaro River

LOE ID:	29977
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Three of the 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for PCB's is 0.00017 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or

	higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43120, PCBs (Polychlorinated biphenyls) Region 3

Pajaro River

LOE ID:	29974
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. None of the 9 samples exceed the Criteria Continuous Concentration.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for PCB's is 0.014 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43120, PCBs (Polychlorinated biphenyls) Region 3

Pajaro River

LOE ID:	56703
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 305THUxxx (305THU-Pajaro River at Thurwachter Bridge).
Temporal Representation:	The samples were collected on 7/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 41659 Region 3

Pajaro River

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seventy-seven of the 93 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventy-seven of the 93 samples exceed the water quality objective for agricultural uses and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41659, Sodium **Region 3**

Pajaro River

LOE ID:	50917
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 35 of 41 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41659, Sodium — Region 3

Pajaro River

LOE ID:	9358
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	52
Number of Exceedances:	42
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 42 of 52 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41758 — Region 3

Pajaro River

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Sixteen lines of evidence are available in the administrative record to assess this pollutant. Three-hundred-forty-three of the 507 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 336 of the 507 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three-hundred-forty-three of the 507 samples exceed the evaluation guideline for Cold Freshwater Habitat and 336 of the 507 samples exceed the Warm Freshwater Habitat evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	12163
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 13 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	11945
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	12085
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	109
Number of Exceedances:	89
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 89 of 109 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	12086
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	109

Number of Exceedances:	89
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 89 of 109 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	11946
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	48731
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 15 of 44 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41758, Turbidity — Region 3

Pajaro River

LOE ID:	48732
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 10 of 44 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41758, Turbidity — Region 3

Pajaro River

LOE ID:	19356
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	19355
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	17524
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	242
Number of Exceedances:	214
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 214 of 242 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 21 monitoring sites [PA-19, PA-CHI - Pajaro River at Chittenden, PA-20, PA-BET - Pajaro River at Betabel Road, PA-21, PA-22, PA-MNS - Pajaro River at Main, PA-23, PA-24, PA-H25 PA-26, PA-MUR - Pajaro River at Murphy's, PA-13, PA-27, PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18]
Temporal Representation:	Data was collected over the time period 9/21/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	12164
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 13 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	17525
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	242
Number of Exceedances:	214

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 214 of 242 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 21 monitoring sites [PA-19, PA-CHI - Pajaro River at Chittenden, PA-20, PA-BET - Pajaro River at Betabel Road, PA-21, PA-22, PA-MNS - Pajaro River at Main, PA-23, PA-24, PA-H25 PA-26, PA-MUR - Pajaro River at Murphy's, PA-13, PA-27, PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18]
Temporal Representation:	Data was collected over the time period 9/21/2005-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	13647
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 4 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	13648
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 4 of 10 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	50925
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 8 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41758, Turbidity **Region 3**

Pajaro River

LOE ID:	50945
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41

Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 6 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41770**	**Region 3**
Pajaro River		

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Sixty-eight lines of evidence are available in the administrative record to assess this pollutant. Six beneficial uses are assessed. A total of 118 of the 1,582 samples exceed the water quality objective for Cold Freshwater Habitat, 120 of 1,601 samples exceed the water quality objective for Warm Freshwater Habitat, and 213 of 1,582 samples exceed the water quality objective for Agricultural supply. A total of 351 of the 1,582 samples exceeded the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. A total of 351 of the 1,582 samples exceed the water quality objectives for Drinking Water and Recreation. Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	50936
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	50934
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	50931
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]

Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	50944
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	50924
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	50916
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	56738
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of 15 samples exceeded the objective.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0, nor raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Watsonville Slough at Pajaro River at Union St Pump Outfall.
Temporal Representation:	Samples were collected approximately once a month from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	56737
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	56736
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	56735
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	56734
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	56729
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	56728
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	56739
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of 4 samples exceeded the objective.
Data Reference:	City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH of all inland surface waters shall not be depressed below 7 or raised above 8.5 as a result of waste discharges.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the Pajaro River Downstream and Pajaro River Upstream stations.
Temporal Representation:	Samples were collected once in 2008 and once in 2009.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff as part of stormwater sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	13897
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	13877
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	13878
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and

	Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	11140
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	58
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 4 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	11159
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	58
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 8 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	11160
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	11141
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	11142
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	58
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 8 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH — Region 3

Pajaro River

LOE ID:	11143
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 8 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH — Region 3

Pajaro River

LOE ID:	10406
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	143
Number of Exceedances:	14

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 14 of 143 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10407
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	143
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 7 of 143 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10404
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	143
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 14 of 143 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10387
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	143
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 12 of 143 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10388
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	143
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 7 of 143 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10405
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	143
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 14 of 143 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10120
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-

	Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10137
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10138
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10139
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10140
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	10121
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	48730
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	48712
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 3 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	48713
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	48714

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	42
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 6 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	48715
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	42
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 6 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	48716
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	42
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 6 of 42 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	48168

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	48169
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	48170
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	47901
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	47902
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	47903
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19075

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19076
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19094
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19092
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19752
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-

	1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19093
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19074
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	17677
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	1259
Number of Exceedances:	187
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 187 of 1259 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-21, PA-22, PA-ONF PA-MNS - Pajaro River at Main, PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	17678
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1259
Number of Exceedances:	104
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 104 of 1259 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-21, PA-22, PA-ONF PA-MNS - Pajaro River at Main, PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	17679
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1259
Number of Exceedances:	309
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 309 of 1259 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-21, PA-22, PA-ONF PA-MNS - Pajaro River at Main, PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH — Region 3

Pajaro River

LOE ID:	17680
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1259
Number of Exceedances:	309
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 309 of 1259 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-21, PA-22, PA-ONF PA-MNS - Pajaro River at Main, PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH — Region 3

Pajaro River

LOE ID:	17681
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1259
Number of Exceedances:	309
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium

	(R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 309 of 1259 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-21, PA-22, PA-ONF PA-MNS - Pajaro River at Main, PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	17694
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1259
Number of Exceedances:	104
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 104 of 1259 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET

	- Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-21, PA-22, PA-ONF PA-MNS - Pajaro River at Main, PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19732
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19733
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19734
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19735
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at

	MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	19736
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	14112
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	13895
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41770, pH **Region 3**

Pajaro River

LOE ID:	13896
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]

Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41723**	**Region 3**
Pajaro River		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Pajaro River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	998
Date TMDL Approved by USEPA:	11/12/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess pollutant. Note LOEs 16219 and 16220 summarize data from sediment pore water and will not be included in sample counts or exceedances. Zero of the 13 sediment samples exceed the evaluation guideline for aquatic life protection. Zero of the nine water samples exceed the evaluation guideline for Municipal and Domestic Supply (drinking water) uses. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. However, three of the 22 water samples (excluding the 4 pore water samples summarized in LOEs 16219 and 16220) exceed the evaluation guideline for aquatic life uses and this use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 22 water samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Pajaro River Watershed Chlorpyrifos and Diazinon TMDL has been approved by USEPA.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of

the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	94052
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	94086
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	94292
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	94293
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	94294
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	56579
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	56578
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	16220
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 3 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305MUR-Pajaro River at Murphy's Crossing, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	16217
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	16216
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	16219

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 4 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 3 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305MUR-Pajaro River at Murphy's Crossing, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	16329
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	16328
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	18638
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41723, Chlorpyrifos **Region 3**

Pajaro River

LOE ID:	18637
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 41246 Region 3

Pajaro River

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Fecal Coliform (including San Benito R., Llagas Cr., and Tequesquita Slough)
TMDL Project Code:	669
Date TMDL Approved by USEPA:	08/03/2010
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Sixty-three of 233 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 16 of 233 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty-three of 233 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Pajaro River Fecal Coliform TMDL has been approved by USEPA on 08/03/2010.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41246, Fecal Coliform — Region 3

Pajaro River

LOE ID:	10261
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 14 of 57

samples exceed the criterion for Coliform, Fecal.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]

Temporal Representation: Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41246, Fecal Coliform **Region 3**

Pajaro River

LOE ID: 10131

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 136
Number of Exceedances: 38

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 38 of 136 samples exceed the criterion for Coliform, Fecal.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41246, Fecal Coliform **Region 3**

Pajaro River

LOE ID:	10262
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 4 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41246, Fecal Coliform — Region 3

Pajaro River

LOE ID:	10385
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	136
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 9 of 136 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41246, Fecal Coliform — Region 3

Pajaro River

LOE ID:	50935
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	40
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 3 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41246, Fecal Coliform **Region 3**

Pajaro River

LOE ID:	50932
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 11 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200

	MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41308**	**Region 3**
Pajaro River		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Pajaro River Nitrate (including Llagas Creek) TMDL
TMDL Project Code:	139
Date TMDL Approved by USEPA:	10/13/2006
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Note, this decision replaces the previous decision for Nutrients. Thirty-two lines of evidence are available in the administrative record to assess this pollutant. Three of the 1771 nitrate samples and zero of the 90 nitrate/nitrite samples exceed the water quality objective for the Agricultural Supply beneficial use. This use is fully supported. However, 458 of the 1767 nitrate samples and 10 of the 90 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. In addition, 35 of the 39 nitrate samples and 63 of the 67 nitrate/nitrite samples exceed the Central Coast Region evaluation guideline (R3 NNE Technical Report, 2010) for Cold and Warm Freshwater Habitat and the following supporting evidence of eutrophication in this water segment is provided: 1) This water segment is currently on the 303(d) List for Low Dissolved Oxygen. The dissolved oxygen for this water body ranged from 1.5 mg/L to 22.4 mg/L, often exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and at times exceeding the Warm Freshwater Habitat water quality objective of 5.0 mg/L. In addition, this waterbody frequently exceeds the upper dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Floating algal mats ranged up to 85% cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010). 3) Water column chlorophyll a concentration ranged up to 734.66 ug/L, at times greatly exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010). 4) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body ranging

from 2.46 mg/L to 2.49 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four hundred fifty-eight (458) of the 1767 nitrate samples and 10 of the 90 nitrate/nitrite samples exceed the water quality objective for the Municipal and Domestic Supply beneficial use. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Thirty-five of the 39 nitrate samples and 63 of the 67 nitrate/nitrite samples exceed the Central Coast Region evaluation guideline and there is sufficient supporting evidence of eutrophic conditions in this water segment.
5. The Pajaro River Nitrate TMDL has been approved by USEPA on 10/13/2006.
6. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	50914
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU -

	Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	50920
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 37 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Two sample results were reported as non-detect or detected not qualified and the detection limit was above the guideline. Because these results are considered estimated, these two samples were not used in analysis and are from 8/6/09 and 10/7/09.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	50913
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	50940
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	39
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 37 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Two sample results were reported as non-detect or detected not qualified and the detection limit was above the guideline. Because these results are considered estimated, these two samples were not used in analysis and are from 8/6/09 and 10/7/09.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	50941
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 38 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Three sample results were reported as non-detect or detected not qualified and the detection limit was above the guideline. Because these results are considered estimated, these three samples were not used in analysis and are from 12/2/08, 8/6/09 and 10/
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	50930
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	50929
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	50921
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 38 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Three sample results were reported as non-detect or detected not qualified and the detection limit was above the guideline. Because these results are considered estimated, these three samples were not used in analysis and are from 12/2/08, 8/6/09 and 10/
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	56673
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded the criteria for nitrite as nitrogen.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22. The maximum contaminant level listed in Table 64431-A for nitrite is 1 mg as N/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Pajaro River @ Union Pump.
Temporal Representation:	Samples were collected monthly from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	56656
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	56657
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	56675
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of four samples collected at the sample site exceeded the criteria for nitrite as nitrogen.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22. The maximum contaminant level listed in Table 64431-A for nitrite is 1 mg as N/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Pajaro River Upstream and Pajaro River Downstream.
Temporal Representation:	Samples were collected on December 15, 2008 and June 16, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff as part of stormwater sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	56643
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded the criteria for nitrate.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of advers effect shall be as derived from Table 3-3 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-3 shows that concentrations of nitrate as N greater than 30 mg/L will cause sever problems for sensitive crops.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Pajaro River @ Union Pump.
Temporal Representation:	Samples were collected monthly from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	56659
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded the criteria for nitrate plus nitrite as nitrogen.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22. The maximum contaminant level listed in Table 64431-A for nitrate plus nitrite is 10 mg as N/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Pajaro River @ Union Pump.
Temporal Representation:	Samples were collected monthly from May 2009 to June 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	56670
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of four samples collected at the sample site exceeded the criteria for nitrite plus nitrate as N.
Data Reference:	City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 lists the maximum concentration for nitrate plus nitrite as N for livestock watering as 100 mg/L.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Pajaro River Upstream and Pajaro River Downstream.
Temporal Representation: Samples were collected on December 15, 2008 and June 16, 2009.
Environmental Conditions:
QAPP Information: Data were collected by the City of Watsonville staff as part of stormwater sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID: 56671

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: None of four samples collected at the sample site exceeded the criteria for nitrite plus nitrate as nitrogen.
Data Reference: City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22. The maximum contaminant level listed in Table 64431-A for nitrate plus nitrite is 10 mg as N/L.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at Pajaro River Upstream and Pajaro River Downstream.
Temporal Representation: Samples were collected on December 15, 2008 and June 16, 2009.
Environmental Conditions:
QAPP Information: Data were collected by the City of Watsonville staff as part of stormwater sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	56644
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of four samples collected at the sample site exceeded the criteria for nitrate.
Data Reference:	City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of advers effect shall be as derived from Table 3-3 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-3 shows that concentrations of nitrate as N greater than 30 mg/L will cause sever problems for sensitive crops.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Pajaro River Upstream and Pajaro River Downstream.
Temporal Representation:	Samples were collected on December 15, 2008 and June 16, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff as part of stormwater sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	56658
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded either objectives for nitrite plus nitrate as N.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and

livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 lists the maximum concentration for nitrate plus nitrite as N for livestock watering as 100 mg/L. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service Guidelines provided in Table 3-3. Table 3-3 identifies the severe effect for NO3 as N above 30 mg/L.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected at station Pajaro River @ Union Pump.
Temporal Representation: Samples were collected monthly from May 2009 to July 2010.
Environmental Conditions:
QAPP Information: Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID: 17942

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 1464
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 1464 samples exceed the criterion for Nitrate as N.
Data Reference: Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A
Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-MNS - Pajaro River at Main, PA-21, PA-22, PA-ONF PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation: Data was collected over the time period 10/4/2000-3/13/2007.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	18448
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	19649
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	19650
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	17956
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1464
Number of Exceedances:	437
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 437 of 1464 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET

	- Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-MNS - Pajaro River at Main, PA-21, PA-22, PA-ONF PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	9298
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	140
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 140 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	9353
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 5 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	9352
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	59
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 59 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	9299
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	140
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 13 of 140 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California

	Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	18449
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	48693
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 28 of 29 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	48677
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	29
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 8 of 29 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	48676
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 28 of 29 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	48675
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 4/27/2009-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	13916
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PAJ_CCL - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41308, Nitrate **Region 3**

Pajaro River

LOE ID:	13917

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PAJ_CCL - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID	**51703**	**Region 3**
Pajaro River		

Pollutant:	**Alachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of nine water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of nine water samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of nine water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51703, Alachlor **Region 3**

Pajaro River

LOE ID:	94308
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP

QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 51703, Alachlor **Region 3**

Pajaro River

LOE ID:	94306
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 51703, Alachlor **Region 3**

Pajaro River

LOE ID:	94307
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Alachlor is 0.002 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**53810**	**Region 3**
Pajaro River		

Pollutant:	**Alkalinity as CaCO3**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for Cold or Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53810, Alkalinity as CaCO3 **Region 3**

Pajaro River

LOE ID:	56550
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53810, Alkalinity as CaCO3 **Region 3**

Pajaro River

LOE ID:	56549
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**41037**	**Region 3**
Pajaro River		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty-two lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Twelve LOEs summarize unionized ammonia data in which three of the 260 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Two LOEs summarize unionized ammonia data in which zero of the 16 samples exceed the water quality objective for unionized ammonia set to protect Fish Spawning Habitat. Eight LOEs summarize total ammonia data where zero of the 1735 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 260 samples exceed the water quality objective for unionized ammonia set to protect aquatic life, 0 of 16 samples exceed the water quality objective for unionized set to protect Fish Spawning habitat, and zero of the 1735 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	56524
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	56552
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	56551
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	56521
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Fish Spawning
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 2 samples exceed the water quality objective for Un-ionized Ammonia (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The Un-ionized ammonia (as N) values were then established and compared to the Un-ionized Ammonia (as N) at 0.025 mg/L in the RB3 Basin Plan.
Data Reference:	City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Region (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters for toxicity.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at two sites: Pajaro River Upstream and Pajaro River Downstream.
Temporal Representation:	Both samples were collected on December 15, 2008 and were classified as wet weather samples. There were no dry weather samples collected.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for the Pajaro River Sub-Basin Stormwater Sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	56522
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Fish Spawning
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of 14 samples exceed the water quality objective for Un-ionized Ammonia (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The Un-ionized ammonia (as N) values were then established and compared to the Un-ionized Ammonia (as N) at 0.025 mg/L in the RB3 Basin Plan

Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Region (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters for toxicity.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Pajaro River @ Union Pump.
Temporal Representation:	Samples were collected monthly from May 2009 to June 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	50938
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	50927
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	50918
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	48581
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	48657
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	13989
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PAJ_CCL - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	13842
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity

	data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-5/19/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	13841
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-5/19/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	9296
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	136
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 136 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at MurphyÂ's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge].
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	9355
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge].
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	9354
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge].
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	9351
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	9295
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	140
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 140 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	9297
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	136
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 136 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at MurphyÂ's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge].
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	17778
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1449
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1449 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-MNS - Pajaro River at Main, PA-21, PA-22, PA-ONF PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-3/13/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	48658
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 4/27/2009-3/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41037, Ammonia **Region 3**

Pajaro River

LOE ID:	17583
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40986** **Region 3**

Pajaro River

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the 2 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 40986, Anthracene **Region 3**

Pajaro River

LOE ID:	15622
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40986, Anthracene **Region 3**

Pajaro River

LOE ID:	15621
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 40986, Anthracene **Region 3**

Pajaro River

LOE ID:	56529
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40986, Anthracene **Region 3**

Pajaro River

LOE ID:	56530
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41632**	**Region 3**
Pajaro River		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 two lines of evidence are necessary to assess listing status and an adverse biological affect must also be reported to support the pollutant decision. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41632, Arsenic **Region 3**

Pajaro River

LOE ID:	56532
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41632, Arsenic **Region 3**

Pajaro River

LOE ID:	56531
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41632, Arsenic **Region 3**

Pajaro River

LOE ID:	15704
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41632, Arsenic **Region 3**

Pajaro River

LOE ID:	15705
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	53672	Region 3
Pajaro River		

Pollutant:	**Atrazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of nine water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of nine water samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of nine water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53672, Atrazine	**Region 3**
Pajaro River	

LOE ID:	94310
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Atrazine is 0.001 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53672, Atrazine **Region 3**

Pajaro River

LOE ID:	94311
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Atrazine is 43 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP

QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53672, Atrazine **Region 3**

Pajaro River

LOE ID:	94309
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Atrazine is 43 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **41383** **Region 3**

Pajaro River

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment

toxicity to result in addition of the pollutant to the section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. The two samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that: .
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The two sediment samples did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41383, Benzo(a)anthracene **Region 3**

Pajaro River

LOE ID:	56542
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41383, Benzo(a)anthracene **Region 3**

Pajaro River

LOE ID:	56541
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41383, Benzo(a)anthracene **Region 3**

Pajaro River

LOE ID:	15759
Pollutant:	Benzo(a)anthracene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41383, Benzo(a)anthracene **Region 3**

Pajaro River

LOE ID:	15760
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41645**	**Region 3**
Pajaro River		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The two sediment samples did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two sediment samples did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41645, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Pajaro River

LOE ID:	15389
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41645, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Pajaro River

LOE ID:	15388
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41645, Benzo(a)pyrene (3,4-Benzopyrene -7-d) Region 3

Pajaro River

LOE ID:	56543
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41645, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Pajaro River

LOE ID:	56554
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53673	Region 3
Pajaro River		

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant; two LOEs summarize water and four LOEs summarize sediment. Zero out of nine water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of thirteen sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53673, Bifenthrin	**Region 3**
Pajaro River	

LOE ID:	56556
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53673, Bifenthrin **Region 3**

Pajaro River

LOE ID:	56555
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53673, Bifenthrin **Region 3**

Pajaro River

LOE ID:	94312
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for BIFENTHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53673, Bifenthrin **Region 3**

Pajaro River

LOE ID:	94313
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for BIFENTHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of bifenthrin does not exceed 0.0006 ug/L and if the 1-h average concentration does not exceed 0.004 ug/L. Mixtures of bifenthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53673, Bifenthrin **Region 3**

Pajaro River

LOE ID:	94085
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53673, Bifenthrin **Region 3**

Pajaro River

LOE ID:	94051
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Bifenthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	53674	Region 3
Pajaro River		

Pollutant:	**Butylate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53674, Butylate **Region 3**

Pajaro River

LOE ID:	94315
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53674, Butylate **Region 3**

Pajaro River

LOE ID:	94314
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS and SWAMP QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**41226**	**Region 3**
Pajaro River		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero out of two sediment samples exceeded the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41226, Cadmium **Region 3**

Pajaro River

LOE ID:	56563
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41226, Cadmium **Region 3**

Pajaro River

LOE ID:	56564
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41226, Cadmium **Region 3**

Pajaro River

LOE ID:	15490
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1

	samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41226, Cadmium **Region 3**

Pajaro River

LOE ID:	15489
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 53719 Region 3

Pajaro River

Pollutant:	**Carbaryl**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of nine water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of nine water samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of nine water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53719, Carbaryl Region 3

Pajaro River

LOE ID:	94317

Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for carbaryl is 40 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53719, Carbaryl **Region 3**

Pajaro River

LOE ID:	94316
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53719, Carbaryl **Region 3**

Pajaro River

LOE ID:	94318
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	41227	Region 3
Pajaro River		

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of nine water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirteen water samples exceeded the evaluation guideline for the municipal beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41227, Carbofuran	**Region 3**
Pajaro River	

LOE ID:	94321
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41227, Carbofuran **Region 3**

Pajaro River

LOE ID:	94319
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41227, Carbofuran **Region 3**

Pajaro River

LOE ID:	94320
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Carbofuran is 0.018 mg/L.
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41227, Carbofuran **Region 3**

Pajaro River

LOE ID:	18778
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for carbofuran.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1 of the Water Quality Control Plan, Central Coast Basin, Municipal and Domestic Supply Objective. Table 3-1 states that Carbofuran shall not exceed 18.0 ug/L (page III-6).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID	**41668**	**Region 3**
Pajaro River		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-one of the 300 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-one of the 300 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a — Region 3

Pajaro River

LOE ID:	48660
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 1 of 42 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a — Region 3

Pajaro River

LOE ID:	48659
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	42
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 1 of 42 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	9301
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	151
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 26 of 151 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	9367
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 57 samples exceed the criterion for Chlorophyll a.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305THU-Pajaro River at Thurwachter Bridge, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	9368
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 2 of 57 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305THU-Pajaro River at Thurwachter Bridge, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 5/31/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	9300
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	151
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 26 of 151 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 2/10/1998-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	13856
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	13857
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	11947
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and

	wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	11948
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	50919
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41668, Chlorophyll-a **Region 3**

Pajaro River

LOE ID:	50939
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53747** **Region 3**

Pajaro River

Pollutant:	**Chlorothalonil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53747, Chlorothalonil **Region 3**

Pajaro River

LOE ID:	94291
Pollutant:	Chlorothalonil
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Chlorothalonil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the 2006 USEPA Drinking Water Standards and Health Advisories, the Ten-day Health Advisory for Chlorothalonil is 200 ug/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **41740** **Region 3**

Pajaro River

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section CWA 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the CWA section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two sediment samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two sediment samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41740, Chrysene (C1-C4) **Region 3**

Pajaro River

LOE ID:	56587

Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41740, Chrysene (C1-C4) **Region 3**

Pajaro River

LOE ID:	56588
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41740, Chrysene (C1-C4) **Region 3**

Pajaro River

LOE ID:	16028
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41740, Chrysene (C1-C4) **Region 3**

Pajaro River

LOE ID:	16029
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41671** **Region 3**

Pajaro River

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of two sediment samples exceeded the aquatic life evaluation guideline and neither did the single water sample. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples (sediment or water) exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41671, Copper **Region 3**

Pajaro River

LOE ID:	16099
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41671, Copper **Region 3**

Pajaro River

LOE ID:	15860
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41671, Copper **Region 3**

Pajaro River

LOE ID:	56589
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41671, Copper **Region 3**

Pajaro River

LOE ID:	56591
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	One of the four samples tested for total copper exceeded the numeric criteria promulgated to protect warm freshwater habitat. The value that exceeded was in 2008 with a value of

	0.012 mg/L downstream of Pajaro River.
Data Reference:	City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (expressed as a 4-day average concentration) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a hardness of 100 mg/L was used. Two values had a criteria of 0.01 mg/L and the other two values used a criteria of 0.03 mg/L using a maximum hardness of 400 mg/L as CaCO3.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Two samples were collected from Pajaro River downstream of the confluence with Salsipuedes Creek in Santa Cruz County. Grab samples collected during the same day at a distance greater than 200 meters.
Temporal Representation:	Two independent grab samples were collected from the Pajaro River on both sampling events which occurred on 12/15/2008 and 06/16/2009.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff as part of stormwater sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41671, Copper Pajaro River **Region 3**

LOE ID:	56590
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 54295 Region 3

Pajaro River

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment and the pollutant concentration must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. None of the seventeen sediment samples exceeded the evaluation guideline (Amweg, 2005) used to protect aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification to add this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the seventeen samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 54295, Cyfluthrin Region 3

Pajaro River

LOE ID:	56593
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54295, Cyfluthrin **Region 3**

Pajaro River

LOE ID:	56592
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54295, Cyfluthrin **Region 3**

Pajaro River

LOE ID:	94053
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]

Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54295, Cyfluthrin **Region 3**

Pajaro River

LOE ID:	94068
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **54296** **Region 3**

Pajaro River

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Six lines of evidence are available in the administrative record to assess this pollutant. The nine water samples did not exceed the evaluation guideline for aquatic life uses (Fojut, T.L. et al., 2012). The thirteen sediment samples did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54296, Cyhalothrin, Lambda **Region 3**

Pajaro River

LOE ID:	94296
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cyhalothrin, Lambda.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54296, Cyhalothrin, Lambda **Region 3**

Pajaro River

LOE ID:	94087
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Cyhalothrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54296, Cyhalothrin, Lambda **Region 3**

Pajaro River

LOE ID:	94073
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Cyhalothrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54296, Cyhalothrin, Lambda **Region 3**

Pajaro River

LOE ID:	94295
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Cyhalothrin, Lambda.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54296, Cyhalothrin, Lambda **Region 3**

Pajaro River

LOE ID:	56597
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54296, Cyhalothrin, Lambda **Region 3**

Pajaro River

LOE ID:	56596
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro

	River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 54297 Region 3

Pajaro River

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Six lines of evidence are available in the administrative record to assess this pollutant. The nine water samples did not exceed the evaluation guideline for aquatic life uses (Fojut, T.L. et al., 2012). The thirteen sediment samples did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54297, Cypermethrin Region 3

Pajaro River

LOE ID:	56602
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54297, Cypermethrin **Region 3**

Pajaro River

LOE ID:	56603
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54297, Cypermethrin **Region 3**

Pajaro River

LOE ID:	94297
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CYPERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54297, Cypermethrin **Region 3**

Pajaro River

LOE ID:	94054
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Cypermethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54297, Cypermethrin **Region 3**

Pajaro River

LOE ID:	94298

Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for CYPERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cypermethrin does not exceed 0.0002 ug/L and if the 1-h average concentration does not exceed 0.001 ug/L. Mixtures of cypermethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54297, Cypermethrin **Region 3**

Pajaro River

LOE ID:	94088
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Cypermethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	54298	Region 3
Pajaro River		

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Six lines of evidence are available in the administrative record to assess this pollutant. The nine water samples did not exceed the evaluation guideline for aquatic life uses (Fojut, T.L. et al., 2012). The thirteen sediment samples did not exceed the evaluation guideline (Amweg et al., 2005) used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54298, Deltamethrin **Region 3**

Pajaro River

LOE ID:	94299
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54298, Deltamethrin **Region 3**

Pajaro River

LOE ID:	94090
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54298, Deltamethrin **Region 3**

Pajaro River

LOE ID:	94300
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54298, Deltamethrin **Region 3**

Pajaro River

LOE ID:	94056
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Deltamethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54298, Deltamethrin **Region 3**

Pajaro River

LOE ID:	56781
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54298, Deltamethrin **Region 3**

Pajaro River

LOE ID:	56782

Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53817** **Region 3**

Pajaro River

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the nine samples exceeded the evaluation guideline (USEPA drinking water health advisory level) used to interpret the narrative water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances

is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the nine samples exceeded the water quality objective and this does not exceed the allowable frequency listed in table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53817, Disulfoton **Region 3**

Pajaro River

LOE ID:	94304
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DISULFOTON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	41700	Region 3
Pajaro River		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with a toxicity to result. Five lines of evidence are available in the administrative record to assess this pollutant. The two sediment samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. In addition, none of the four water samples exceed the Municipal & Domestic Supply water quality objective. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The two sediment samples did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. In addition, none of the four water samples exceed the Municipal & Domestic Supply water quality objective. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41700, Endrin	**Region 3**
Pajaro River	

LOE ID:	56653
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41700, Endrin **Region 3**

Pajaro River

LOE ID:	56652
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity)

	for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41700, Endrin **Region 3**

Pajaro River

LOE ID:	16386
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41700, Endrin **Region 3**

Pajaro River

LOE ID:	18756
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for endrin.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1 of the Water Quality Control Plan, Central Coast Basin, Municipal and Domestic Supply Objective. Table 3-1 states that Endrin shall not exceed 0.2 ug/L (page III-6).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41700, Endrin **Region 3**

Pajaro River

LOE ID:	16385
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**53818**	**Region 3**
Pajaro River		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline and zero of the thirteen sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine water samples exceed the evaluation guideline and zero of the thirteen sediment samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53818, Esfenvalerate/Fenvalerate **Region 3**

Pajaro River

LOE ID:	56669
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53818, Esfenvalerate/Fenvalerate **Region 3**

Pajaro River

LOE ID:	56680
Pollutant:	Esfenvalerate/Fenvalerate

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53818, Esfenvalerate/Fenvalerate **Region 3**

Pajaro River

LOE ID:	94092
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53818, Esfenvalerate/Fenvalerate **Region 3**

Pajaro River

LOE ID:	94058
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Esfenvalerate.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment

	sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53818, Esfenvalerate/Fenvalerate **Region 3**

Pajaro River

LOE ID:	94305
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53818, Esfenvalerate/Fenvalerate **Region 3**

Pajaro River

LOE ID:	94322
Pollutant:	Esfenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**53819**	**Region 3**
Pajaro River		

Pollutant:	**Ethalfluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to

determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53819, Ethalfluralin **Region 3**

Pajaro River

LOE ID:	94223
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53819, Ethalfluralin **Region 3**

Pajaro River

LOE ID:	94224
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **53820** **Region 3**

Pajaro River

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6

Conclusion:	of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirteen sediment samples exceed the evaluation guideline for aquatic life uses. Zero of the nine water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53820, Fenpropathrin **Region 3**

Pajaro River

LOE ID:	94098
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53820, Fenpropathrin **Region 3**

Pajaro River

LOE ID:	94064
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Fenpropathrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.

Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53820, Fenpropathrin **Region 3**

Pajaro River

LOE ID:	94225
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53820, Fenpropathrin **Region 3**

Pajaro River

LOE ID:	94226
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53820, Fenpropathrin **Region 3**

Pajaro River

LOE ID:	56697
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53820, Fenpropathrin **Region 3**

Pajaro River

LOE ID:	56696
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53821	Region 3
Pajaro River		

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the twelve sediment samples exceed the evaluation guideline for aquatic life protection (Maul et al. 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the twelve samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53821, Fipronil	**Region 3**
Pajaro River	

LOE ID:	94093
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Fipronil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53821, Fipronil **Region 3**

Pajaro River

LOE ID:	94059
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Fipronil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**53822**	**Region 3**
Pajaro River		

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the twelve sediment samples exceed the evaluation guideline for aquatic life protection (Maul et al. 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the twelve samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53822, Fipronil Sulfide — Region 3

Pajaro River

LOE ID:	94094
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Fipronil sulfide.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53822, Fipronil Sulfide — Region 3

Pajaro River

LOE ID:	94060
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Fipronil sulfide.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**53823**	**Region 3**
Pajaro River		

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the twelve sediment samples exceed the evaluation guideline for aquatic life protection (Maul et al. 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the twelve samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53823, Fipronil Sulfone **Region 3**

Pajaro River

LOE ID:	94061
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53823, Fipronil Sulfone **Region 3**

Pajaro River

LOE ID:	94095
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Fipronil sulfone.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **41250** **Region 3**

Pajaro River

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41250, Fluoranthene **Region 3**

Pajaro River

LOE ID:	56731
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41250, Fluoranthene **Region 3**

Pajaro River

LOE ID:	56732
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41250, Fluoranthene **Region 3**

Pajaro River

LOE ID:	16470

Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41250, Fluoranthene **Region 3**

Pajaro River

LOE ID:	16471
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41309**	**Region 3**
Pajaro River		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41309, Fluorene **Region 3**

Pajaro River

LOE ID:	16588
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41309, Fluorene **Region 3**

Pajaro River

LOE ID:	16587
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41309, Fluorene **Region 3**

Pajaro River

LOE ID:	56733
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41309, Fluorene **Region 3**

Pajaro River

LOE ID:	56741
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	53824	Region 3
Pajaro River		

Pollutant:	**Hexazinone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore the beneficial use rating is set to "insufficient information." Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 9 water samples exceed the relevant evaluation guidelines used to interpret the narrative water quality objective for the protection of aquatic life and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53824, Hexazinone	**Region 3**
Pajaro River	

LOE ID:	94227
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53824, Hexazinone **Region 3**

Pajaro River

LOE ID:	94228
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.

Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	53825	Region 3
Pajaro River		

Pollutant:	**Iprodione**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53825, Iprodione	**Region 3**
Pajaro River	

LOE ID:	94229
Pollutant:	Iprodione
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Iprodione.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Iprodione is 280 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water with 0.04 mg/kg/day as the reference dose. An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Summary for Iprodione
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**41713**	**Region 3**
Pajaro River		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two sediment samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41713, Lead **Region 3**

Pajaro River

LOE ID:	56745
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41713, Lead **Region 3**

Pajaro River

LOE ID:	56751
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41713, Lead **Region 3**

Pajaro River

LOE ID:	17182
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41713, Lead **Region 3**

Pajaro River

LOE ID:	17183
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	53837	Region 3
Pajaro River		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53837, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	**Region 3**
Pajaro River	

LOE ID:	56753
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53837, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Pajaro River

LOE ID:	56752
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53829 Region 3

Pajaro River

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines used to interpret the water quality objectives for aquatic life protection, and one of the nine samples exceed the evaluation guideline for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection and one of the nine samples exceed the evaluation guideline for drinking water uses. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53829, Malathion Region 3

Pajaro River

LOE ID:	94230
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53829, Malathion **Region 3**

Pajaro River

LOE ID:	94231
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53829, Malathion **Region 3**

Pajaro River

LOE ID:	94232
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **41717** **Region 3**

Pajaro River

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41717, Mercury **Region 3**

Pajaro River

LOE ID:	56762
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41717, Mercury **Region 3**

Pajaro River

LOE ID:	56761
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41717, Mercury **Region 3**

Pajaro River

LOE ID:	17268
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41717, Mercury **Region 3**

Pajaro River

LOE ID:	17267
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**54299**	**Region 3**
Pajaro River		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (maximum acceptable toxicant concentration (MATC), USEPA 1985) and drinking water (USEPA IRIS reference dose). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable

beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54299, Methidathion **Region 3**

Pajaro River

LOE ID:	94234
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP

QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54299, Methidathion **Region 3**

Pajaro River

LOE ID:	94235
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54299, Methidathion **Region 3**

Pajaro River

LOE ID:	94233
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L, which is the geometric mean of the LOEC and NOEC, as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. (USEPA OPP Ecotoxicity database)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54300**	**Region 3**
Pajaro River		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine water samples exceed the evaluation guideline for aquatic life protection (CDFG, 1992), zero of the nine water samples exceed the evaluation guideline for drinking water (USEPA IRIS reference dose) and zero of the thirteen sediment samples exceed the evaluation guideline (Ding et al., 2011) used to interpret the narrative water quality objective for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to add this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine water samples exceed the evaluation guidelines and zero of the thirteen sediment samples exceed the evaluation guideline. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54300, Methyl Parathion **Region 3**

Pajaro River

LOE ID:	94248
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54300, Methyl Parathion **Region 3**

Pajaro River

LOE ID:	94062
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54300, Methyl Parathion **Region 3**

Pajaro River

LOE ID:	94246
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54300, Methyl Parathion **Region 3**

Pajaro River

LOE ID:	94096
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54300, Methyl Parathion **Region 3**

Pajaro River

LOE ID:	94247
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Paration, methyl is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54300, Methyl Parathion **Region 3**

Pajaro River

LOE ID:	56616
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54300, Methyl Parathion **Region 3**

Pajaro River

LOE ID:	56615
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	54301	Region 3
Pajaro River		

Pollutant:	**Molinate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life protection (USEPA national ambient water quality criteria) and drinking water (California Maximum Contaminant Level). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54301, Molinate **Region 3**

Pajaro River

LOE ID:	94236
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54301, Molinate **Region 3**

Pajaro River

LOE ID:	94237

Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for molinate is 20 ug/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54301, Molinate **Region 3**

Pajaro River

LOE ID:	94238
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**41733**	**Region 3**
Pajaro River		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41733, Naphthalene — Region 3

Pajaro River

LOE ID:	56634
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41733, Naphthalene — Region 3

Pajaro River

LOE ID:	56633
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41733, Naphthalene **Region 3**

Pajaro River

LOE ID:	17321
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]

Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41733, Naphthalene **Region 3**

Pajaro River

LOE ID:	17334
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **54302** **Region 3**

Pajaro River

Pollutant:	**Napropamide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of nine water samples exceeded the evaluation guideline for the aquatic life beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1, and therefore the beneficial use rating is set to 'insufficient information.' Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of nine water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54302, Napropamide **Region 3**

Pajaro River

LOE ID:	94244
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54302, Napropamide **Region 3**

Pajaro River

LOE ID:	94239
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **41734** **Region 3**

Pajaro River

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41734, Nickel **Region 3**

Pajaro River

LOE ID:	56641
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41734, Nickel **Region 3**

Pajaro River

LOE ID:	56642
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41734, Nickel — Region 3

Pajaro River

LOE ID:	16902
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41734, Nickel — Region 3

Pajaro River

LOE ID:	16903
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **53995** **Region 3**

Pajaro River

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 61 samples exceed the water quality objective for Agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 61 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53995, Nitrogen, Nitrite **Region 3**

Pajaro River

LOE ID:	56684
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53995, Nitrogen, Nitrite **Region 3**

Pajaro River

LOE ID:	56672
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded the criteria for nitrite.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Pajaro River @ Union Pump.
Temporal Representation:	Samples were collected monthly from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53995, Nitrogen, Nitrite **Region 3**

Pajaro River

LOE ID:	56674
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of four samples collected at the two sample sites exceeded the criteria for nitrite.
Data Reference:	City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Pajaro River Upstream and Pajaro River Downstream.
Temporal Representation:	Samples were collected on December 15, 2008 and June 16, 2009.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent

	with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53995, Nitrogen, Nitrite **Region 3**

Pajaro River

LOE ID:	50915
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53838** **Region 3**

Pajaro River

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53838, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Pajaro River

LOE ID:	56701
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (MacDonald et al. 2000).

Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53838, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Pajaro River

LOE ID:	56702
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for PAH, Total is 22,800 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53839** **Region 3**

Pajaro River

Pollutant:	**Pentachlorobenzene (PCNB)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53839, Pentachlorobenzene (PCNB) **Region 3**

Pajaro River

LOE ID:	94249
Pollutant:	Pentachlorobenzene (PCNB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PCNB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services archived Advisory Level for Pentachloronitrobenzene is 20 ug/L.
Guideline Reference:	CDPH Archived Advisory Levels for Drinking Water. Archived Advisory Levels are currently considered Notification Levels.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	54303	Region 3
Pajaro River		

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirteen sediment samples exceed the evaluation guideline for aquatic life uses. One of the water samples exceed the evaluation guideline used to interpret the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the water samples and zero of the sediment samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54303, Permethrin, total	**Region 3**

Pajaro River

LOE ID:	94115
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54303, Permethrin, total **Region 3**

Pajaro River

LOE ID:	94097
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA, Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54303, Permethrin, total **Region 3**

Pajaro River

LOE ID:	94251
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for PERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54303, Permethrin, total **Region 3**

Pajaro River

LOE ID:	94250
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 9 samples exceed the criterion for PERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54303, Permethrin, total — Region 3

Pajaro River

LOE ID:	56710
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54303, Permethrin, total — Region 3

Pajaro River

LOE ID:	56711
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41764**	**Region 3**
Pajaro River		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with sediment toxicity to result in addition of the pollutant to the section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41764, Phenanthrene **Region 3**

Pajaro River

LOE ID:	56740
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41764, Phenanthrene **Region 3**

Pajaro River

LOE ID:	56746
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity for sediment-dwelling organisms) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41764, Phenanthrene **Region 3**

Pajaro River

LOE ID:	16989
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41764, Phenanthrene **Region 3**

Pajaro River

LOE ID:	17002
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]

Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 54304 Region 3

Pajaro River

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54304, Phosmet Region 3

Pajaro River

LOE ID:	94254
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54304, Phosmet **Region 3**

Pajaro River

LOE ID:	94253
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54304, Phosmet **Region 3**

Pajaro River

LOE ID:	94252
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54305** **Region 3**

Pajaro River

Pollutant: **Prometryn**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54305, Prometryn **Region 3**

Pajaro River

LOE ID:	94255
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54305, Prometryn **Region 3**

Pajaro River

LOE ID:	94257
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54305, Prometryn **Region 3**

Pajaro River

LOE ID:	94256
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for prometryn is 28 Âµg/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54306** **Region 3**

Pajaro River

Pollutant:	**Propanil (DCPA mono- and di-acid degrad)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table

3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54306, Propanil (DCPA mono- and di-acid degrad) Region 3

Pajaro River

LOE ID:	94258
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54306, Propanil (DCPA mono- and di-acid degrad) **Region 3**

Pajaro River

LOE ID:	94259
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54307** **Region 3**

Pajaro River

Pollutant:	**Propiconazole**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for aquatic life protection. This sample size is insufficient

to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54307, Propiconazole **Region 3**

Pajaro River

LOE ID:	94260
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54307, Propiconazole **Region 3**

Pajaro River

LOE ID:	94261
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **41825** **Region 3**

Pajaro River

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for

pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41825, Pyrene **Region 3**

Pajaro River

LOE ID:	56765
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41825, Pyrene **Region 3**

Pajaro River

LOE ID:	56766
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41825, Pyrene **Region 3**

Pajaro River

LOE ID:	17120
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41825, Pyrene **Region 3**

Pajaro River

LOE ID:	17119
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**54308**	**Region 3**
Pajaro River		

Pollutant:	**Resmethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline for drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54308, Resmethrin **Region 3**

Pajaro River

LOE ID:	94262
Pollutant:	Resmethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for RESMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Resmethrin is 210 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **54309** **Region 3**

Pajaro River

Pollutant:	**Simazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the

nine samples exceed the evaluation guidelines for aquatic life protection and for drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54309, Simazine **Region 3**

Pajaro River

LOE ID:	94264
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for simazine is 0.004 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54309, Simazine **Region 3**

Pajaro River

LOE ID:	94263
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54309, Simazine **Region 3**

Pajaro River

LOE ID:	94265
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**41699**	**Region 3**
Pajaro River		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence (LOE) is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Eleven lines of evidence are available in the administrative record to assess this pollutant. Sixty-one of the 1,116 samples exceed the water quality objective for agricultural use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-one of 1,116 samples exceeded the objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	50912
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 18 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	56618
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	19785
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	48171
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 7/2/2008 10:48:31 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in

QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	48674
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	42
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 42 samples exceed the criterion for Conductivity(Us).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	10386
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	132
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 5 of 132 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	11139
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	58
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 17 of 58 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	10119
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	17626
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	17493

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	816
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 10 of 816 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 6 monitoring sites [PA-CHI - Pajaro River at Chittenden, PA-BET - Pajaro River at Betabel Road, PA-MUR - Pajaro River at Murphy's, PA-H25 PA-MNS - Pajaro River at Main, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-11/2/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41699, Specific Conductivity **Region 3**

Pajaro River

LOE ID:	17479
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41756 Region 3

Pajaro River

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. A total of 133 of the 1581 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 133 of the 1581 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41756, Temperature, water Region 3

Pajaro River

LOE ID:	12087
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	147
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Pajaro River to determine beneficial use support and results are as follows: 5 of 147 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 5 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 12/18/1997-3/15/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	12107
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Pajaro River to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing, 305PAJ-Pajaro River at Betabel Road, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/31/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	17637
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1207
Number of Exceedances:	106
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Pajaro River to determine beneficial use support and results are as follows: 106 of 1207 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 24 monitoring sites [PA-BET - Pajaro River at Betabel Road, PA-CHI - Pajaro River at Chittenden, PA-MUR - Pajaro River at Murphy's, PA-19, PA-20, PA-H25 PA-21, PA-22, PA-ONF PA-MNS - Pajaro River at Main, PA-23, PA-24, PA-26, PA-13, PA-27, PA-UVAS PA-14, PA-29, PA-15, PA-30, PA-16, PA-31, PA-18, PA-FLR - Pajaro River at Frazer Lake Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/11/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	48733
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI - Pajaro River, 305PJP - Pajaro River at Main St]
Temporal Representation:	Data was collected over the time period 2/13/2007-6/29/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	13649
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	48172
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Pajaro River to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/6/2008 8:00:00 AM-10/28/2009 10:31:30 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	12165
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Pajaro River to determine beneficial use support and results are as follows: 9 of 58 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature

	does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street, 305THU-Pajaro River at Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 4/26/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	19626
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PAJ_SCC - PAJARO R at CHITTENDEN PASS, 305PMO_SCC - PAJARO R at MOUTH]
Temporal Representation:	Data was collected over the time period 9/7/2000-4/3/2003.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	18630
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305-PAJAR-21 - Pajaro River under Thurwachter Bridge]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	56628
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 15 samples exceeded the evaluation guideline.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected from Pajaro River at Union St Pump Outfall.
Temporal Representation:	Samples were collected approximately once a month from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	56629
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 4 samples exceeded the objective.
Data Reference:	City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature fo intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Samples were collected from the Pajaro River Downstream and Pajaro River Upstream stations.
Temporal Representation:	Samples were collected once in 2008 and once in 2009.

Environmental Conditions:
QAPP Information: Data were collected by the City of Watsonville staff as part of stormwater sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID: 56622

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 15
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Data collected by the City of Watsonville. None of the 15 samples exceeded the evaluation guideline for temperature.
Data Reference: Data for metals, temperature, nutrients and bacteria in the Pajaro River Hydrological Unit

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline: Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference: Inland Fishes of California

Spatial Representation: Pajaro River at Union St. Pump Outfall.
Temporal Representation: Samples collected once a month from 5/15/2009 to 7/27/2010.
Environmental Conditions:
QAPP Information: "Although no QA/QC results are provided with this data, values reported are above detection limits or are otherwise reported as below detection limit (<). The laboratories performing the analyses used certified methods for surface water analysis. Analyses performed by the laboratories included spike, duplicate, and reference standard methods for verifying the accuracy and precision of the analyses. No field blanks or field duplicates were collected." (Jim Crowley, Source Control Manager from the City of Watsonville)
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID: 56620

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River - 305PS0034]
Temporal Representation:	Data was collected on a single day 6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	56627
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data collected by the City of Watsonville.
Data Reference:	Data for metals, temperature, nutrients and bacteria in the Pajaro River Hydrological Unit
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Pajaro River at the Union Pump, Sakata Pump and Lincoln Pump Outfalls (Upstream and Downstream).

Temporal Representation:	Samples collected in December of 2008 and June of 2009.
Environmental Conditions:	Samples represent dry and wet weather conditions.
QAPP Information:	"Although no QA/QC results are provided with this data, values reported are above detection limits or are otherwise reported as below detection limit (<). The laboratories performing the analyses used certified methods for surface water analysis. Analyses performed by the laboratories included spike, duplicate, and reference standard methods for verifying the accuracy and precision of the analyses. No field blanks or field duplicates were collected." (Jim Crowley, Source Control Manager for the City of Watsonville)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41756, Temperature, water **Region 3**

Pajaro River

LOE ID:	50926
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Pajaro River to determine beneficial use support and results are as follows: 7 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53998** **Region 3**

Pajaro River

Pollutant:	**Thiobencarb/Bolero**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses and drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53998, Thiobencarb/Bolero **Region 3**

Pajaro River

LOE ID:	94267
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for thiobencarb is 0.07 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53998, Thiobencarb/Bolero **Region 3**

Pajaro River

LOE ID:	94268
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53998, Thiobencarb/Bolero **Region 3**

Pajaro River

LOE ID:	94266
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**53997**	**Region 3**
Pajaro River		

Pollutant:	**Trifluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guidelines for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53997, Trifluralin **Region 3**

Pajaro River

LOE ID:	94269
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53997, Trifluralin **Region 3**

Pajaro River

LOE ID:	94270

Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**54310**	**Region 3**
Pajaro River		

Pollutant:	**Vinclozolin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the nine samples exceed the evaluation guideline drinking water uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the nine samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 54310, Vinclozolin **Region 3**

Pajaro River

LOE ID:	94271
Pollutant:	Vinclozolin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Vinclozolin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Vinclozolin is 180 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	41761	Region 3
Pajaro River		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the four water samples exceed the evaluation guideline applied to protect for marine beneficial uses. Zero of two sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither water nor sediment samples exceeded the evaluation guidelines; therefore these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41761, Zinc	**Region 3**
Pajaro River	

LOE ID:	56692
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41761, Zinc **Region 3**

Pajaro River

LOE ID:	56691
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41761, Zinc **Region 3**

Pajaro River

LOE ID:	56693
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	None of four samples tested for total zinc exceeded the numeric criteria promulgated to protect warm freshwater habitat.
Data Reference:	City of Watsonville Pajaro River Sub-Basin Stormwater Sampling Data, Dec. 2008-Jun. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations (expressed as a 4-day average concentration) to protect aquatic life in freshwater. The criterion in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling. Section (b)(1) in CTR contains the hardness dependent formula for the metals criterion. If no hardness data were available, a hardness of 100 mg/L was used.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Spatial Representation:	Two samples were collected from Pajaro River downstream of the confluence with Salsipuedes Creek in Santa Cruz County. Grab samples collected during the same day at a distance greater than 200 meters.
Temporal Representation:	Two independent grab samples were collected from the Pajaro River on both sampling events which occurred on 12/15/2008 and 06/16/2009.
Environmental Conditions:	There were no specific environmental conditions reported during sampling events.
QAPP Information:	Data were collected by the City of Watsonville staff as part of stormwater sampling. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41761, Zinc **Region 3**

Pajaro River

LOE ID:	17755
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41761, Zinc **Region 3**

Pajaro River

LOE ID:	17754
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41739 Region 3

Pajaro River

Pollutant:	**Chromium**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence are available in the administrative record to assess this pollutant. Both sediment samples exceeded the evaluation guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Both sediment samples exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this exceeds the allowable frequency in table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41739, Chromium Region 3

Pajaro River

LOE ID:	15931

Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41739, Chromium **Region 3**

Pajaro River

LOE ID:	15944
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41739, Chromium **Region 3**

Pajaro River

LOE ID:	56663
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected at seven different stations to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed in samples colelcted from station 305THU on 7/2/08 and 10/29/08.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	

Spatial Representation:	The samples were collected at station 305THU - Pajaro River at Thurwachter.
Temporal Representation:	The samples were collected in May, July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41739, Chromium **Region 3**

Pajaro River

LOE ID:	56585
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41739, Chromium **Region 3**

Pajaro River

LOE ID:	56586
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41739, Chromium **Region 3**

Pajaro River

LOE ID:	56664
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

	that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 305THUxxx.
Temporal Representation:	The sample was collected in July 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41739, Chromium **Region 3**

Pajaro River

LOE ID:	56660
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate sediment toxicity. One of the six samples exhibited significant toxicity to Hyalella azteca growth. The toxicity tests for the samples included survival and growth of Hyalella azteca. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at Pajaro River stations 305CHI and 305PJP.
Temporal Representation:	The samples were collected annualy between April 2007 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture

QAPP Information Reference(s):	data and provided in SWAMP format. The project QAPP was provided. Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 53999 Region 3

Pajaro River

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Note, this pollutant was assessed under the pollutant name DDD in the 2010 and 2012 assessment cycles. In this current assessment cycle, the pollutant DDE is being assessed separately. Nine lines of evidence are available in the administrative record to assess pollutant. Eleven of the 18 water samples exceed the evaluation guideline for drinking water uses. In addition, six of the 20 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life. This water segment is also on the 303(d) List due to sediment toxicity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 18 water samples exceed the evaluation guideline for drinking water uses and six of the 20 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life and these exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. In addition, this water segment is also on the 303(d) List due to sediment toxicity. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River

LOE ID:	56769
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: a total of 4 samples were collected and 2 samples were in exceedance but the two samples collected on 2/25/2008 and 2/26/2008 were averaged resulting in 1 of 3 temporally independent samples exceeding the criterion for DDE. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River

LOE ID:	56546
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River

LOE ID:	56547
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River

LOE ID:	56771
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: a total of 4 samples were collected and 2 samples were in exceedance but the two samples collected on 2/25/2008 and 2/26/2008 were averaged resulting in 1 of 3 temporally independent samples exceeding the criterion for DDE. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River

LOE ID:	56663
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected at seven different stations to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed in samples colelcted from station 305THU on 7/2/08 and 10/29/08.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305THU - Pajaro River at Thurwachter.
Temporal Representation:	The samples were collected in May, July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River

LOE ID:	94100
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 4 of 16 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River

LOE ID:	94066
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 4 of 16 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	

QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River

LOE ID:	94241
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for p p' DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDE(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53999, DDE (Dichlorodiphenyldichloroethylene) Region 3

Pajaro River

LOE ID:	29982
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Eight of the 9 samples exceed the Human Health Criteria.

Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for 4,4'-DDE is 0.00059 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID	**54000**	**Region 3**
Pajaro River		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 4.1 and 4.6 of the Listing Policy. Under section 4.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 4.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Note, this pollutant was assessed under the pollutant name DDD in the 2010 and 2012 assessment cycles. In this current assessment cycle, the pollutant DDT is being assessed separately. Eighteen lines of evidence are available in the administrative record to assess pollutant. Seven of the 18 water samples exceed the evaluation guideline for aquatic life uses and eight of the 18 water samples exceed the evaluation guideline for drinking water uses. In addition, two of the 20 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life. This water segment is also on the 303(d) List due to sediment toxicity. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 18 water samples exceed the evaluation guideline for aquatic life uses and eight of the 18 water samples exceed the evaluation guideline for drinking water uses. In addition, two of the 20 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life and these exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. In addition, this water segment is also on the 303(d) List due to sediment toxicity.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Pajaro River

LOE ID:	29990
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Eight of the 9 samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for 4,4'-DDT is 0.00059 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or

	higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	29973
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Seven of the 9 samples exceed the Criteria Continuous Concentration.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for 4,4'-DDT is 0.001 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, Pajaro River adjacent to railroad bridge on south shore (Lat, N 36.9019, Long, W 121.7550)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	94084
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	94101
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	94067
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	94243
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for p p' DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	94242
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for p p' DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	94034
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	94245
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for p p' DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	56776

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	56775
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	56663
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected at seven different stations to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed in samples colelcted from station 305THU on 7/2/08 and 10/29/08.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305THU - Pajaro River at Thurwachter.
Temporal Representation:	The samples were collected in May, July and October 2008 and October 2009.
Environmental Conditions:	

QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	56780
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: a total of 4 samples were collected but two samples collected on 2/25/2008 and 2/26/2008 were averaged. 1 of 3 temporally independent samples exceed the criterion for DDT. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	56778
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: a total of 4 samples were collected but two samples collected on 2/25/2008 and 2/26/2008 were averaged. 1 of 3 temporally independent samples exceed the criterion for DDT. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	56648
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: a total of 4 samples were collected but two samples collected on 2/25/2008 and 2/26/2008 were averaged. 1 of 3 temporally independent samples exceed the criterion for DDT, Total. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	56646
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: a total of 4 samples were collected but two samples collected on 2/25/2008 and 2/26/2008 were averaged. 1 of 3 temporally independent samples exceed the criterion for DDT, Total. Data assessed were suspended sediment samples isolated from the whole water sample.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-2/17/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	56639
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 54000, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pajaro River

LOE ID:	56638
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41443	Region 3
Pajaro River		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Nine LOEs summarize sediment samples. Six sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and ten additional sediment samples are

summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, sixteen total samples are available to assess toxic effects in sediment samples. Three of the sixteen sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Sixteen LOEs summarize water samples. Fifteen water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and twenty-nine water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, forty-four total samples are available to assess toxic effects in water samples. Eight of the forty-four water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 16 sediment samples and 8 of the 44 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	56663
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected at seven different stations to evaluate sediment toxicity. Two of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival were observed in samples colelcted from station 305THU on 7/2/08 and 10/29/08.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared

	to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at station 305THU - Pajaro River at Thurwachter.
Temporal Representation:	The samples were collected in May, July and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	56664
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 305THUxxx.
Temporal Representation:	The sample was collected in July 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	56662
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty samples were collected to evaluate water toxicity. Six of the 20 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas, and total cell count (growth) of Selenastrum capricornutum. At station 305CHI, samples collected on 1/24/08, 2/22/28 and 10/1/08 exhibited significant toxicity to Ceriodaphnia dubia. The sample collected on 1/24/08 also exhibited significant toxicity to Pimephales promelas. Samples from station 305PJP collected on 1/25/08, 10/1/08 and 2/6/09 exhibited significant toxicity to Ceriodaphnia dubia. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at Pajaro River stations 305CHI and 305PJP.
Temporal Representation:	The samples were collected between October 2007 and March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	56661
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9

Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. One of the nine samples exhibited significant toxicity. The toxicity tests included survival of Hyalella azteca and survival of Ceriodaphnia dubia. A statistically significant effect on Hyalella azteca was observed in the sample from station 305THU on 9/22/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at 305THU - Pajaro River at Thurwachter.
Temporal Representation:	The samples ere collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	56660
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected to evaluate sediment toxicity. One of the six samples exhibited significant toxicity to Hyalella azteca growth. The toxicity tests for the samples included survival and growth of Hyalella azteca. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at Pajaro River stations 305CHI and 305PJP.
Temporal Representation:	The samples were collected annualy between April 2007 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	94543
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Nine samples were collected to evaluate water toxicity. One of the nine samples exhibited significant toxicity. The toxicity tests included survival of Hyalella azteca and survival of Ceriodaphnia dubia. A statistically significant effect on Hyalella azteca was observed in the sample from station 305THU on 9/22/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at 305THU - Pajaro River at Thurwachter.
Temporal Representation:	The samples ere collected from January 2008 to October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	94542
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	6
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty samples were collected to evaluate water toxicity. Six of the 20 samples exhibited significant toxicity. The toxicity tests for the samples included survival and reproduction of Ceriodaphnia dubia, survival and growth of Pimephales promelas, and total cell count (growth) of Selenastrum capricornutum. At station 305CHI, samples collected on 1/24/08, 2/22/28 and 10/1/08 exhibited significant toxicity to Ceriodaphnia dubia. The sample collected on 1/24/08 also exhibited significant toxicity to Pimephales promelas. Samples from station 305PJP collected on 1/25/08, 10/1/08 and 2/6/09 exhibited significant toxicity to Ceriodaphnia dubia. It should be noted that the samples collected in 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at Pajaro River stations 305CHI and 305PJP.
Temporal Representation:	The samples were collected between October 2007 and March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. The project QAPP was provided.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24617
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24618
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when

	compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24607
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street and 305CHI].
Temporal Representation:	Data was collected between 2/21/06 and 9/26/06. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24443
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24444
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24606
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Pajaro River to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305PJP-Pajaro River at Main Street and 305CHI - Pajaro River at Chittinen Gap].

Temporal Representation:	Data was collected between 2/21/06 and 9/26/06. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24584
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 5/19/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24596
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 3 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305MUR-Pajaro River at Murphy's Crossing, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24597
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 3 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305MUR-Pajaro River at Murphy's Crossing, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24445
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24576
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24585
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24574
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 5/19/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24575
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and

	cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24586
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both

	water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24620
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24621
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [305CHI-Pajaro River at Chittenden Gap, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected over the time period 2/21/2006-9/26/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41443, Toxicity **Region 3**

Pajaro River

LOE ID:	24622
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41629**	**Region 3**
Pajaro River		

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Sources:	Agriculture
TMDL Name:	Pajaro River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	998
Date TMDL Approved by USEPA:	11/12/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Fifteen lines of evidence are available in the administrative record to assess pollutant. Note LOEs 16611 and 16610 summarize data from sediment pore water and will not be included in sample counts or exceedances. Zero of the 13 sediment samples exceed the evaluation guideline for aquatic life protection. Zero of the nine water samples exceed the evaluation guideline for Municipal and Domestic Supply (drinking water) uses. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. However, two of the 22 water samples (excluding the 4 pore water samples summarized in LOEs 16611 and 16610) exceed the evaluation guideline for aquatic life uses and this use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 22 water samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Pajaro River Watershed Chlorpyrifos and Diazinon TMDL has been approved by USEPA.
5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	16610
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 3 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305MUR-Pajaro River at Murphy's Crossing, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	16611
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 3 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305MUR-Pajaro River at Murphy's Crossing, 305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	16624
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	16740
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41629, Diazinon — Region 3

Pajaro River

LOE ID:	16638
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [305PAJ001 - Pajaro River at Y Road, 305PJP-Pajaro River at Main Street, 305CHI-Pajaro River at Chittenden Gap, 305MUR-Pajaro River at Murphy's Crossing]
Temporal Representation:	Data was collected over the time period 1/10/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41629, Diazinon — Region 3

Pajaro River

LOE ID:	16739
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PJP-Pajaro River at Main Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	18731
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06)

	Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	18732
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).

Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	56787
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	56788

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pajaro River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [Pajaro River at Thurwachter Bridge - 305THUxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	94057
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	94302
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU -

	Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	94303
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	94301
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 1/6/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 41629, Diazinon **Region 3**

Pajaro River

LOE ID:	94091
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed USGS data for Pajaro River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 4 monitoring sites [Pajaro River Estuary-Sediment site 6 - 305PJESD6, Pajaro River Estuary-Sediment site 7 - 305PJESD7, Pajaro River Estuary-Sediment site 8 - 305PJESD8, 305THU - Pajaro River at Thurwachter - 305THU]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	
QAPP Information:	USGS QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**41702**	**Region 3**
Pajaro River		

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of 39 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 39 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 39 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 39 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41702, Enterococcus — Region 3

Pajaro River

LOE ID:	14150
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Pajaro River to determine beneficial use support and results are as follows: 3 of 39 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PAJ_CCL - Pajaro River at Thurwachter].
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41702, Enterococcus — Region 3

Pajaro River

LOE ID:	14151
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 1 monitoring site [305PAJ_CCL - Pajaro River at Thurwachter]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID **40601** **Region 3**

Pajaro River

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40601, Heptachlor **Region 3**

Pajaro River

LOE ID:	18770
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for heptachlor.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1 of the Water Quality Control Plan, Central Coast Basin, Municipal and Domestic Supply Objective. Table 3-1 states that Heptachlor shall not exceed 0.01 ug/L (page III-6).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID **40614** **Region 3**

Pajaro River

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40614, Heptachlor epoxide **Region 3**

Pajaro River

LOE ID:	18771
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for heptachlor epoxide.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1 of the Water Quality Control Plan, Central Coast Basin, Municipal and Domestic Supply Objective. Table 3-1 states that Heptachlor Epoxide shall not exceed 0.01 ug/L (page III-6).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 41691 Region 3

Pajaro River

Pollutant:	**Methoxychlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41691, Methoxychlor — Region 3

Pajaro River

LOE ID:	18772
Pollutant:	Methoxychlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for methoxychlor.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table

Objective/Criterion Reference:	3-1 of the Water Quality Control Plan, Central Coast Basin, Municipal and Domestic Supply Objective. Table 3-1 states that Methoxychlor shall not exceed 100.0 ug/L (page III-6). Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 41757 Region 3

Pajaro River

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal & Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal & Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41757, Toxaphene Region 3

Pajaro River

LOE ID:	18773
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Pajaro River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for toxaphene.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1 of the Water Quality Control Plan, Central Coast Basin, Municipal and Domestic Supply Objective. Table 3-1 states that Toxaphene shall not exceed 5.0 ug/L (page III-6).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Basin Plan Municipal and Domestic Supply Objective for Toxaphene is 5.0 ug/L as stated in Table 3-1 (page III-6). All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1.
Guideline Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Spatial Representation:	Data for this line of evidence for Pajaro River was collected at 2 monitoring sites [DHS006 - Pajaro River @ Railroad Bridge, DHS007 - Pajaro River downstream of the ditch draining]
Temporal Representation:	Data was collected over the time period 12/13/1994-1/27/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID	**34152**	**Region 3**
Pajaro River		

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Agriculture | Domestic Animals/Livestock | Grazing-Related Sources | Habitat Modification | Highway/Road/Bridge Construction | Hydromodification | Land Development | Logging Road Construction/Maintenance | Urban Runoff/Storm Sewers
TMDL Name:	Pajaro River Siltation/Sedimentation (including San Benito R., Llagas Cr., Rider Gulch Cr.)
TMDL Project Code:	140
Date TMDL Approved by USEPA:	05/03/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

The Pajaro River Siltation/Sedimentation (including San Benito R., Llagas Cr., Rider Gulch Cr.) TMDL and implementation plan was approved for this water segment-pollutant combination by USEPA on 5/03/07.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34152, Sedimentation/Siltation **Region 3**

Pajaro River

LOE ID:	1851
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Corralitos Creek**
Water Body ID: **CAR3051001019990225102704**
Water Body Type: **River & Stream**

DECISION ID **38814** **Region 3**
Corralitos Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture-animal | Domestic Pet Waste | Municipal Point Sources | Natural Sources | Onsite Wastewater Systems (Septic Tanks) | Transient encampments
TMDL Name:	Corralitos Creek Pathogens
TMDL Project Code:	600
Date TMDL Approved by USEPA:	01/17/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. The minimum number of samples necessary to determine if a water segment can be removed from the Section 303(d) list is 26.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of the 11 samples exceed the water quality objective for Water Contact Recreation. One of the 11 samples exceeds the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met.

LOE #3941 is a placeholder for data collected prior to 2006. That data is not available in the data set to evaluate.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

A TMDL for Fecal Coliform in Corralitos Creek was approved by USEPA on January 17, 2012.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 11 samples exceed the water quality objective for Water Contact Recreation but, the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because there is insufficient data available in the database to justify a change in the listing.

This is a decision previously approved by the State Water Resources Control Board and the USEPA.

No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38814, Fecal Coliform **Region 3**

Corralitos Creek

LOE ID:	10179
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38814, Fecal Coliform **Region 3**

Corralitos Creek

LOE ID:	10195
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38814, Fecal Coliform **Region 3**

Corralitos Creek

LOE ID:	3941
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)

Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	**38954**	**Region 3**
Corralitos Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture-animal | Domestic Pet Waste | Municipal Point Sources | Natural Sources | Onsite Wastewater Systems (Septic Tanks) | Transient encampments
TMDL Name:	Corralitos Creek Pathogens
TMDL Project Code:	600
Date TMDL Approved by USEPA:	01/17/2012
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Twelve of 35 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use but only 2 of 35 samples exceed the water quality objective for Non-Contact Recreation.

In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of 35 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Corralitos Creek TMDL for Pathogens was approved by the Central Coast Regional Board on March 20, 2009 and approved by USEPA on January 17, 2012.
5.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38954, Escherichia coli (E. coli) Region 3

Corralitos Creek

LOE ID:	18554
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-CORRA-22 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38954, Escherichia coli (E. coli) Region 3

Corralitos Creek

LOE ID:	10198
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38954, Escherichia coli (E. coli) **Region 3**

Corralitos Creek

LOE ID:	10197
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38954, Escherichia coli (E. coli) **Region 3**

Corralitos Creek

LOE ID:	18531
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38954, Escherichia coli (E. coli) **Region 3**

Corralitos Creek

LOE ID:	18555
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-CORRA-22 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38954, Escherichia coli (E. coli) **Region 3**

Corralitos Creek

LOE ID:	18530
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 7 of 16 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**38739**	**Region 3**
Corralitos Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which zero of the 11 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 772 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. The unionized ammonia sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 11 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 772 total ammonia samples exceed the EPA's Lifetime Health advisory level in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the

Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38739, Ammonia **Region 3**

Corralitos Creek

LOE ID:	17564
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38739, Ammonia **Region 3**

Corralitos Creek

LOE ID:	17795
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	743
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 743 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-VAR - Corralitos Creek at Varni Rd., CO-129]
Temporal Representation:	Data was collected over the time period 10/4/2000-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38739, Ammonia **Region 3**

Corralitos Creek

LOE ID:	9312
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38739, Ammonia **Region 3**

Corralitos Creek

LOE ID:	9313
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38739, Ammonia **Region 3**

Corralitos Creek

LOE ID:	17602
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305-CORRA-21 - Corralitos Creek, 305-CORRA-22 - Corralitos Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38739, Ammonia **Region 3**

Corralitos Creek

LOE ID:	9311
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38265**	**Region 3**
Corralitos Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 11 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable

	beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38265, Boron **Region 3**

Corralitos Creek

LOE ID:	9314
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39047** **Region 3**

Corralitos Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 11 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39047, Chloride **Region 3**

Corralitos Creek

LOE ID:	9315
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38863**	**Region 3**
Corralitos Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 10 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 10 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38863, Chlorophyll-a — Region 3

Corralitos Creek

LOE ID:	12141
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38863, Chlorophyll-a — Region 3

Corralitos Creek

LOE ID:	12142

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39455**	**Region 3**
Corralitos Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Nine of the 901 samples exceed the water quality objective for Municipal and Domestic Supply. One of the 901 samples exceeds the water quality objectives for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 901 samples exceed the water quality objective for Municipal and Domestic Supply. One of the 901 samples exceeds the water quality objectives for Agricultural Supply. These do not exceed the allowable frequencies listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39455, Nitrate **Region 3**

Corralitos Creek

LOE ID:	18304
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	108
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 2 of 108 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/8/2004-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39455, Nitrate **Region 3**

Corralitos Creek

LOE ID:	17673
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	756
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 7 of 756 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-VAR - Corralitos Creek at Varni Rd., CO-129]
Temporal Representation:	Data was collected over the time period 10/4/2000-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39455, Nitrate — Region 3

Corralitos Creek

LOE ID:	18368
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-CORRA-22 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39455, Nitrate — Region 3

Corralitos Creek

LOE ID:	19687
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/11/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39455, Nitrate **Region 3**

Corralitos Creek

LOE ID:	17959
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	756
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 756 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-VAR - Corralitos Creek at Varni Rd., CO-129]
Temporal Representation:	Data was collected over the time period 10/4/2000-3/20/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39455, Nitrate **Region 3**

Corralitos Creek

LOE ID:	19671
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/11/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39455, Nitrate **Region 3**

Corralitos Creek

LOE ID:	9284
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39455, Nitrate **Region 3**

Corralitos Creek

LOE ID:	9285
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39455, Nitrate **Region 3**

Corralitos Creek

LOE ID:	18303
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	108
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 108 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/8/2004-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39455, Nitrate **Region 3**

Corralitos Creek

LOE ID:	18382
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-CORRA-22 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **32636** **Region 3**

Corralitos Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirteen lines of evidence are available in the administrative record to assess these pollutants. Two water quality objectives are assessed: Seventy-eight of the 802 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and 39 of 818 samples exceed the dissolved oxygen water quality objective for Warm Freshwater Habitat.The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-eight of the 802 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and 39 of 818 samples exceed the dissolved oxygen water quality objective for Warm Freshwater Habitat. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the median value did not exceed the General Objective. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	19787

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	19788
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use

	support and results are as follows: 0 of 19 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	18061
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-CORRA-22 - Corralitos Creek, 305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	1849
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Four of 16 samples exceed the water quality objectives (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	COLD: Dissolved oxygen concentration shall not be reduced below 7.0 mg/L at any time. WARM: Dissolved oxygen concentration shall not be reduced below 5.0 mg/L at any time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	One sample site.
Temporal Representation:	Monthly sampling. Samples were taken from 8/18/97 to 12/16/98; over 15 sampling dates.
Environmental Conditions:	
QAPP Information:	CCAMP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	12143
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	12157
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	12158
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	12159
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	18054
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	168
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 39 of 168 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	18055
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	168
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 25 of 168 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	18062
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-CORRA-22 - Corralitos Creek, 305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	17819

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	594
Number of Exceedances:	38
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 38 of 594 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-129 CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32636, Oxygen, Dissolved **Region 3**

Corralitos Creek

LOE ID:	17820
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	594
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 10 of 594 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-129 CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38812** **Region 3**

Corralitos Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 11 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 11 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38812, Sodium **Region 3**

Corralitos Creek

LOE ID:	9286
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38950** **Region 3**

Corralitos Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an

error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision to specific conductivity.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Five of the 670 samples exceed the water quality objective for Agricultural Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 670 samples exceed the water quality objective for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38950, Specific Conductivity **Region 3**

Corralitos Creek

LOE ID:	17511
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	464
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 5 of 464 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 5 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-LCR CO-129 CO-BVR - Corralitos Creek at Brown Valley Rd., CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-11/2/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38950, Specific Conductivity **Region 3**

Corralitos Creek

LOE ID:	17550
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	169
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 169 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38950, Specific Conductivity **Region 3**

Corralitos Creek

LOE ID:	17407

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 2/17/2003-5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38950, Specific Conductivity **Region 3**

Corralitos Creek

LOE ID:	10196
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38950, Specific Conductivity **Region 3**

Corralitos Creek

LOE ID:	19802
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 38421 Region 3

Corralitos Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the 827 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of the 827 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38421, Temperature, water Region 3

Corralitos Creek

LOE ID:	19628
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38421, Temperature, water **Region 3**

Corralitos Creek

LOE ID:	12161
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38421, Temperature, water **Region 3**

Corralitos Creek

LOE ID:	18691
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-CORRA-22 - Corralitos Creek, 305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38421, Temperature, water **Region 3**

Corralitos Creek

LOE ID:	18798
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	174
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 174 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38421, Temperature, water **Region 3**

Corralitos Creek

LOE ID:	17656
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	615
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 12 of 615 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-129 CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **43142** **Region 3**

Corralitos Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy.

Six lines of evidence are available in the administrative record to assess this pollutant. Twenty-one of 124 samples exceed the evaluation guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Further assessment of the data warrants defining two segments of Corralitos Creek as the impairment is only evident at monitoring sites in the reach below Browns Valley Road. Below Browns Valley Road, 13 of the 39 samples collected at two monitoring sites (at Green Valley Road and at Scurich Lane) exceed the evaluation guideline. This segment of Corralitos Creek is impaired by turbidity. In the reach upstream of Browns Valley Road, only 8 of 85 samples exceed the evaluation guideline (based on data from three monitoring sites located at Browns Valley Road, Las Colinas Drive and below Rider Creek). This does not exceed the allowable frequency listed in table 3.2 of the Listing Policy. Therefore the segment upstream of Browns Valley Road is not impaired by turbidity.

A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Corralitos Creek as having "Definite run or population" and specifically cites the following: In a 2006 DFG report, steelhead densities were estimated and the report rates the smolt habitat as "good", "fair" and "very good" in Corralitos Creek. Therefore this turbidity evaluation Guideline is relevant to the water body.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of 39 samples (collected from stations below Browns Valley Road) exceed the evaluation guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43142, Turbidity **Region 3**

Corralitos Creek

LOE ID:	17487
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	98
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 21 of 98 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR - Corralitos Creek at Las Colinas Drive and CO-SCU Corralitos Creek at Scurich Lane]
Temporal Representation:	Data was collected over the time period 9/21/2005-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43142, Turbidity **Region 3**

Corralitos Creek

LOE ID:	17486
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	98
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 21 of 98 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR - Corralitos Creek at Las Colinas Drive and CO-SCU - Corralitos Creek at Scurich Lane]
Temporal Representation:	Data was collected over the time period 9/21/2005-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43142, Turbidity **Region 3**

Corralitos Creek

LOE ID:	19387
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 3/25/1999-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43142, Turbidity **Region 3**

Corralitos Creek

LOE ID:	19386
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 3/25/1999-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43142, Turbidity **Region 3**

Corralitos Creek

LOE ID:	11881
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 7/21/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43142, Turbidity **Region 3**

Corralitos Creek

LOE ID:	11880
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 7/21/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38803	Region 3
Corralitos Creek		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Two hundred eighty-nine of 862 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation, and this rate of exceedance supports rejection of the null hypothesis. One hundred ninety-nine of 862 samples exceed the Agricultural Supply water quality objective, and 135 of 862 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and these rates of exceedance are supportive of beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two hundred eighty-nine of 862 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38803, pH	**Region 3**
Corralitos Creek	

LOE ID:	17785

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	652
Number of Exceedances:	282
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 282 of 652 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-129 CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	18221
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	169
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 169 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	17787
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	652
Number of Exceedances:	282
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 282 of 652 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-129 CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	17788
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	652
Number of Exceedances:	133
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 133 of 652 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-129 CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	18220
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	169
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 169 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	18219
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	169
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 169 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19775
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	17786
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	652
Number of Exceedances:	282
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 282 of 652 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-129 CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	18202
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	169
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 169 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	18203
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	169
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 169 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-

	CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	18204
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	169
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 169 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [305-SALSI-21 - East Lake Avenue Bridge, 305-CASSE-21 - East Lake Avenue Bridge, 305-CORRA-23 - Pista Lane/7226 Freedom Blvd., 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road, 305-BROWN-21 - Corralitos Creek at Browns Valley Road, 305-CORRA-22 - Corralitos Creek, 305-CORRA-21 - Corralitos Creek]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19435
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19061
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-CORRA-22 - Corralitos Creek, 305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	10234
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	10214
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	10215
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	10216
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	10217
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	10218
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Corralitos Creek to determine beneficial use support and results are as follows: 4 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 1 monitoring site [305COR2- Corralitos Creek at Browns Valley Road]
Temporal Representation:	Data was collected over the time period 1/24/2005-3/16/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19774
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19773
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither

	be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19077
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-CORRA-22 - Corralitos Creek, 305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19078
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-CORRA-22 - Corralitos Creek, 305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19079
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-CORRA-22 - Corralitos Creek, 305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19080
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-CORRA-22 - Corralitos Creek, 305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	17770
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	652
Number of Exceedances:	133
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 133 of 652 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-129 CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	17769
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	652
Number of Exceedances:	195

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Corralitos Creek to determine beneficial use support and results are as follows: 195 of 652 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 7 monitoring sites [CO-GVA - Corralitos Creek at Green Valley, CO-BVR - Corralitos Creek at Brown Valley Rd., CO-LCR Scurich Road, CO-BVA - Corralitos Creek at Brown Valley Rd., CO-129 CO-VAR - Corralitos Creek at Varni Rd.]
Temporal Representation:	Data was collected over the time period 10/4/2000-2/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19081
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 4 monitoring sites [305-CORRA-22 - Corralitos Creek, 305-SALSI-21 - East Lake Avenue Bridge, 305-CORRA-21 - Corralitos Creek, 305-CORRA-24 Corralitos Creek @ 727 Eureka Canyon Road]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19771
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38803, pH **Region 3**

Corralitos Creek

LOE ID:	19772
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Corralitos Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Corralitos Creek was collected at 2 monitoring sites [305COR_SCC - CORRALITOS C at RIDER RD, 305COB_SCC - CORRALITOS C BELOW BROWNS V B]
Temporal Representation:	Data was collected over the time period 7/13/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Rider Creek**
Water Body ID: **CAR3051001019981207100234**
Water Body Type: **River & Stream**

DECISION ID **34323** **Region 3**
Rider Creek

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Erosion/Siltation | Highway/Road/Bridge Construction | Logging Road Construction/Maintenance
TMDL Name:	Pajaro River Siltation/Sedimentation (including San Benito R., Llagas Cr., Rider Gulch Cr.)
TMDL Project Code:	140
Date TMDL Approved by USEPA:	05/03/2007
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. The Pajaro River Siltation/Sedimentation (including San Benito R., Llagas Cr., Rider Gulch Cr.) TMDL and implementation plan was approved for this water segment-pollutant combination by USEPA on 5/03/07. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34323, Sedimentation/Siltation **Region 3**
Rider Creek

LOE ID:	1848
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

	2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Ano Nuevo Creek**
Water Body ID: **CAR3042001319980825152253**
Water Body Type: **River & Stream**

DECISION ID **38003** **Region 3**
Ano Nuevo Creek

Pollutant: **Electrical Conductivity**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the 3 samples exceed the water quality objective for Agricultural Supply. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 3 samples exceed the water quality objective for Agricultural Supply and this does not exceed the allowable frequency in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38003, Electrical Conductivity **Region 3**
Ano Nuevo Creek

LOE ID: 17483

Pollutant: Electrical Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38003, Electrical Conductivity **Region 3**

Ano Nuevo Creek

LOE ID:	17513
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when

	conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37985**	**Region 3**
Ano Nuevo Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence were available for this decision. The single sample did not exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. The single sample also did not exceed the water quality objective for Non-Contact Recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37985, Escherichia coli (E. coli)	**Region 3**
Ano Nuevo Creek	

LOE ID:	18541

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37985, Escherichia coli (E. coli) **Region 3**

Ano Nuevo Creek

LOE ID:	18542
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a

	minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37147 Region 3

Ano Nuevo Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for Municipal and Domestic Supply and Agricultural Supply. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives for Municipal and Domestic Supply and Agricultural Supply. The sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are met or exceeded. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37147, Nitrate Region 3

Ano Nuevo Creek

LOE ID:	17993
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37147, Nitrate **Region 3**

Ano Nuevo Creek

LOE ID:	17992
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **37199** **Region 3**

Ano Nuevo Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. A single line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Cold Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A single line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Cold Freshwater Habitat. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37199, Oxygen, Dissolved **Region 3**

Ano Nuevo Creek

LOE ID:	18002
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37307**	**Region 3**
Ano Nuevo Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. A single line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A single line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37307, Temperature, water **Region 3**

Ano Nuevo Creek

LOE ID:	18579
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **37156** **Region 3**

Ano Nuevo Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. THe single sample does not exceed the water quality objective Agricultural Supply, Cold Freshwater Habitat, Warm Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation or Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37156, pH **Region 3**

Ano Nuevo Creek

LOE ID:	18644
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37156, pH **Region 3**

Ano Nuevo Creek

LOE ID:	18759
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37156, pH **Region 3**

Ano Nuevo Creek

LOE ID:	18627
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37156, pH **Region 3**

Ano Nuevo Creek

LOE ID:	18628
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37156, pH **Region 3**

Ano Nuevo Creek

LOE ID:	18629
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Ano Nuevo Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Ano Nuevo Creek was collected at 1 monitoring site [304-NEWYE-11 - Ano Nuevo Creek]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Old Womans Creek**
Water Body ID: **CAR3042001020020124121753**
Water Body Type: **River & Stream**

DECISION ID **41020** **Region 3**
Old Womans Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data are assessed. However, the pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the General water quality objective as it applies to the Cold Freshwater Habitat beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the General water quality objective as it applies to the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41020, Ammonia **Region 3**
Old Womans Creek

LOE ID: 17584

Pollutant: Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	41073	Region 3
Old Womans Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 4 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use or the water quality objective for Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41073, Escherichia coli (E. coli) **Region 3**

Old Womans Creek

LOE ID:	18463
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41073, Escherichia coli (E. coli) **Region 3**

Old Womans Creek

LOE ID:	18409
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41073, Escherichia coli (E. coli) **Region 3**

Old Womans Creek

LOE ID:	18464
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41073, Escherichia coli (E. coli) **Region 3**

Old Womans Creek

LOE ID:	18424
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41072** **Region 3**

Old Womans Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Municipal and Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41072, Nitrate **Region 3**

Old Womans Creek

LOE ID:	18245
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not

	contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected on a single day 5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41072, Nitrate **Region 3**

Old Womans Creek

LOE ID:	18206
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were

identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.

QAPP Information Reference(s):

DECISION ID	41074	Region 3
Old Womans Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 34 samples exceed the Cold Freshwater Habitat water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 34 samples exceed the Cold Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41074, Oxygen, Dissolved	**Region 3**
Old Womans Creek	

LOE ID:	17965
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41074, Oxygen, Dissolved **Region 3**

Old Womans Creek

LOE ID:	18093
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were

identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.

QAPP Information Reference(s):

DECISION ID	41654	Region 3
Old Womans Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 35 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 35 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41654, Temperature, water	**Region 3**
Old Womans Creek	

LOE ID:	18840
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41654, Temperature, water **Region 3**

Old Womans Creek

LOE ID:	18761
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41655** **Region 3**

Old Womans Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One of the 35 samples exceed the Cold Freshwater Habitat water quality objective and None of the 35 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 35 samples exceed the Cold Freshwater Habitat water quality objective and None of the 35 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41655, pH **Region 3**

Old Womans Creek

LOE ID:	18848
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41655, pH **Region 3**

Old Womans Creek

LOE ID:	18849
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41655, pH **Region 3**

Old Womans Creek

LOE ID:	18006
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41655, pH **Region 3**

Old Womans Creek

LOE ID:	18007
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41655, pH **Region 3**

Old Womans Creek

LOE ID:	18008
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41655, pH **Region 3**

Old Womans Creek

LOE ID:	17990
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 33 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41655, pH **Region 3**

Old Womans Creek

LOE ID:	18846

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Old Womans Creek to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41655, pH **Region 3**

Old Womans Creek

LOE ID:	18847
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Old Womans Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Old Womans Creek was collected at 1 monitoring site [202-GAZOS-15 - Old Womans Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Gazos Creek**
Water Body ID: **CAR3042001019990304101540**
Water Body Type: **River & Stream**

DECISION ID **40260** **Region 3**
Gazos Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Five lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two LOEs summarize unionized ammonia data in which one of the 88 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 98 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 88 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 98 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40260, Ammonia **Region 3**
Gazos Creek

LOE ID: 50477

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40260, Ammonia **Region 3**

Gazos Creek

LOE ID:	50454
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40260, Ammonia **Region 3**

Gazos Creek

LOE ID:	9220
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 52 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40260, Ammonia **Region 3**

Gazos Creek

LOE ID:	9221
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 51 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40260, Ammonia **Region 3**

Gazos Creek

LOE ID:	17548
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-14 - Diversions, 202-GAZOS-16 - Gazos Creek Mainstem]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40449**	**Region 3**
Gazos Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 85 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 85 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40449, Boron **Region 3**

Gazos Creek

LOE ID:	9222
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	46
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 46 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40449, Boron **Region 3**

Gazos Creek

LOE ID:	50282
Pollutant:	Boron

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40276**	**Region 3**
Gazos Creek		

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Eleven of the 85 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 85 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40276, Chloride **Region 3**

Gazos Creek

LOE ID:	9223
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	46
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 7 of 46 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40276, Chloride **Region 3**

Gazos Creek

LOE ID:	50283
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**39772**	**Region 3**
Gazos Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 89

samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 89 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39772, Chlorophyll-a **Region 3**

Gazos Creek

LOE ID:	50455
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-

	Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39772, Chlorophyll-a **Region 3**

Gazos Creek

LOE ID:	11971
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39772, Chlorophyll-a **Region 3**

Gazos Creek

LOE ID:	9199
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 51 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40115	Region 3
Gazos Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Eight of the 72 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 72 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40115, Escherichia coli (E. coli)	**Region 3**
Gazos Creek	

LOE ID:	18537
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40115, Escherichia coli (E. coli) Region 3

Gazos Creek

LOE ID:	18454
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-14 - Diversions, 202-GAZOS-16 - Gazos Creek Mainstem]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40115, Escherichia coli (E. coli) Region 3

Gazos Creek

LOE ID:	10339
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	23
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 2 of 23 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40115, Escherichia coli (E. coli) **Region 3**

Gazos Creek

LOE ID:	10340
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 23 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40115, Escherichia coli (E. coli) **Region 3**

Gazos Creek

LOE ID:	18536
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/1/2004. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40115, Escherichia coli (E. coli) **Region 3**

Gazos Creek

LOE ID:	17579
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-14 - Diversions, 202-GAZOS-16 - Gazos Creek Mainstem]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40115, Escherichia coli (E. coli) **Region 3**

Gazos Creek

LOE ID:	50498
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	37
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 4 of 37 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40893**	**Region 3**
Gazos Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 88 samples exceed the water quality objective for contact recreation (i.e. swimming) and 2 of the 88 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of the 88 samples exceed the water quality objective for contact recreation (i.e. swimming) and 2 of the 88 samples exceed the water quality objective for non-contact recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40893, Fecal Coliform **Region 3**

Gazos Creek

LOE ID:	50497
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	37
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 6 of 37 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40893, Fecal Coliform **Region 3**

Gazos Creek

LOE ID:	50514
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40893, Fecal Coliform **Region 3**

Gazos Creek

LOE ID:	10281
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	51
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 2 of 51 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40893, Fecal Coliform **Region 3**

Gazos Creek

LOE ID:	10280
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 8 of 51 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40122**	**Region 3**
Gazos Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Zero of the 105 nitrate samples exceed the water quality objectives for Agricultural Supply and Municipal and Domestic Supply beneficial uses. One of the 39 nitrate samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. Zero of the 39 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. One of the 39 nitrate/nitrite samples exceed the water quality objective for Cold Freshwater Habitat. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. Insufficient evidence was found to support nitrate as a cause of impairment for Cold or Warm Freshwater habitats: 1) Dissolved oxygen for this water body ranged 4.76 mg/L to 13.18 mg/L, occasionally exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the upper dissolved oxygen screening of 13.0 mg/L (R3 NNE Technical Report, 2010). 2) Water column chlorophyll a concentration averaged 3.09 ug/L and peaked at 48.0 ug/L, but has not exceeded the screening threshold of 15 ug/L since 2009 (R3 NNE Technical Report, 2010). 3) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted that benthic algal contribution to oxygen deficit, algae biomass, and benthic chlorophyll a concentrations for this water body would not exceed screening thresholds for cold water habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1 . The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 105 nitrate samples exceed the water quality objectives for Agricultural Supply and Municipal and Domestic Supply beneficial uses. One of the 39 nitrate samples exceed the water quality objective for the Cold Freshwater Habitat beneficial use. Zero of the 39 nitrate/nitrite samples exceed the water quality objectives for the Agricultural Supply and the Municipal and Domestic Supply beneficial uses. One of the 39 nitrate/nitrite samples exceed the water quality objective for Cold Freshwater Habitat. These exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	18323
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-14 - Diversions, 202-GAZOS-16 - Gazos Creek Mainstem]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	9196
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 52 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	9197
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	52
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 52 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	18505
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence,

	202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	18338
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-14 - Diversions, 202-GAZOS-16 - Gazos Creek Mainstem]
Temporal Representation:	Data was collected over the time period 5/26/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	18489
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	50495
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	50494
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	50434
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	50457
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to

	determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	50285
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40122, Nitrate **Region 3**

Gazos Creek

LOE ID:	50456
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]

Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 47319 Region 3

Gazos Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 39 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 39 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47319, Nitrogen, Nitrite Region 3

Gazos Creek

LOE ID:	50435
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40453**	**Region 3**
Gazos Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Two of the 170 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 170 samples exceeded the Cold Freshwater Habitat water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40453, Oxygen, Dissolved **Region 3**

Gazos Creek

LOE ID:	50472
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40453, Oxygen, Dissolved **Region 3**

Gazos Creek

LOE ID:	50473
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40453, Oxygen, Dissolved **Region 3**

Gazos Creek

LOE ID:	17979
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40453, Oxygen, Dissolved **Region 3**

Gazos Creek

LOE ID:	18073
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 66 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-16 - Gazos Creek Mainstem, 202-GAZOS-14 - Diversions]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40453, Oxygen, Dissolved **Region 3**

Gazos Creek

LOE ID:	11952

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40453, Oxygen, Dissolved **Region 3**

Gazos Creek

LOE ID:	12266
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 5 of 51 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40453, Oxygen, Dissolved **Region 3**

Gazos Creek

LOE ID:	11953
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40453, Oxygen, Dissolved **Region 3**

Gazos Creek

LOE ID:	12265
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40138** **Region 3**

Gazos Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 85 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 85 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40138, Sodium **Region 3**

Gazos Creek

LOE ID:	9198
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	46
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 7 of 46 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40138, Sodium **Region 3**

Gazos Creek

LOE ID:	50437
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40279 Region 3

Gazos Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Six lines of evidence are available in the administrative record to assess this pollutant. Three of the 169 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 169 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40279, Specific Conductivity — Region 3

Gazos Creek

LOE ID:	50284
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40279, Specific Conductivity **Region 3**

Gazos Creek

LOE ID:	17480
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day

	Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40279, Specific Conductivity **Region 3**

Gazos Creek

LOE ID:	10282
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 51 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40279, Specific Conductivity **Region 3**

Gazos Creek

LOE ID:	10318
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40279, Specific Conductivity **Region 3**

Gazos Creek

LOE ID:	17406
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40279, Specific Conductivity **Region 3**

Gazos Creek

LOE ID:	17552
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 67 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-16 - Gazos Creek Mainstem, 202-GAZOS-14 - Diversions]

Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40139** **Region 3**

Gazos Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the 171 samples exceed the cold freshwater habitat evaluation guideline (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 171 samples exceed the cold freshwater habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40139, Temperature, water **Region 3**

Gazos Creek

LOE ID:	18800
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and

	results are as follows: 0 of 67 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-16 - Gazos Creek Mainstem, 202-GAZOS-14 - Diversions]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40139, Temperature, water **Region 3**

Gazos Creek

LOE ID:	18633
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40139, Temperature, water **Region 3**

Gazos Creek

LOE ID:	11970
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40139, Temperature, water **Region 3**

Gazos Creek

LOE ID:	11951

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 51 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40139, Temperature, water **Region 3**

Gazos Creek

LOE ID:	50476
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the

	criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40149**	**Region 3**
Gazos Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Nine of the 88 samples exceed the evaluation guideline for cold freshwater habitat (Sigler et al. 1984). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 88 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40149, Turbidity **Region 3**

Gazos Creek

LOE ID:	11969
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40149, Turbidity **Region 3**

Gazos Creek

LOE ID:	11950
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 7 of 46 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40149, Turbidity **Region 3**

Gazos Creek

LOE ID:	50475
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 40027 Region 3

Gazos Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Five of the 168 samples exceed the water quality objectives for Agricultural Supply and Cold Freshwater habitats. Six of the 168 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 168 samples exceed the water quality objectives for Agricultural Supply and Cold Freshwater habitats. Six of the 168 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40027, pH Region 3

Gazos Creek

LOE ID:	18242
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 67 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-16 - Gazos Creek Mainstem, 202-GAZOS-14 - Diversions]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10322
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor

	raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	18258
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 67 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-16 - Gazos Creek Mainstem, 202-GAZOS-14 - Diversions]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	18259

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 67 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-16 - Gazos Creek Mainstem, 202-GAZOS-14 - Diversions]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	18260
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 67 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-16 - Gazos Creek Mainstem, 202-GAZOS-14 - Diversions]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	19173
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	19154
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	19155
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 4 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	19156
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	19157
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Gazos Creek to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 3 monitoring sites [202-GAZOS-11 - Gazos Creek at mouth, 202-GAZOS-12 - Gazos Creek at Slate Cr confluence, 202-GAZOS-13 - Gazos Creek at South Fork confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10298
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	51
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 3 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10299
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10300
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	51
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 4 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10301
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	51
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 4 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10302
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	51

Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Gazos Creek to determine beneficial use support and results are as follows: 4 of 51 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10338
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10319
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10320
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	10321
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Gazos Creek to determine beneficial use support and results are as follows: 0

	of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	18257
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 67 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 2 monitoring sites [202-GAZOS-16 - Gazos Creek Mainstem, 202-GAZOS-14 - Diversions]
Temporal Representation:	Data was collected over the time period 8/10/2003-11/16/2004.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	50436
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	50513
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	50496
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	50474
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40027, pH **Region 3**

Gazos Creek

LOE ID:	50515
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40233**	**Region 3**
Gazos Creek		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. and this sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40233, Anthracene **Region 3**

Gazos Creek

LOE ID:	15751
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40354** **Region 3**

Gazos Creek

Pollutant: **Arsenic**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40354, Arsenic **Region 3**

Gazos Creek

LOE ID:	15823
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40058** **Region 3**

Gazos Creek

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40058, Benzo(a)anthracene **Region 3**

Gazos Creek

LOE ID:	15695

Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40110**	**Region 3**
Gazos Creek		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one

for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40110, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Gazos Creek

LOE ID:	15516
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	40120	Region 3
Gazos Creek		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40120, Cadmium	**Region 3**
Gazos Creek	

LOE ID:	15365
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1

	samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40234**	**Region 3**
Gazos Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample (pore water) exceed the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. However, pore water will not be the sole basis for any decision. Additionally this not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40234, Chlorpyrifos **Region 3**

Gazos Creek

LOE ID:	16174
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	40132	Region 3
Gazos Creek		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40132, Chromium	**Region 3**
Gazos Creek	

LOE ID:	16059
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40089**	**Region 3**
Gazos Creek		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40089, Chrysene (C1-C4) **Region 3**

Gazos Creek

LOE ID:	15904
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40092** **Region 3**

Gazos Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed.

Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for sediment, and pollutant concentrations in sediment must be associated with toxicity to result in adding that pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40092, Copper **Region 3**

Gazos Creek

LOE ID:	15973
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-

	Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40099**	**Region 3**
Gazos Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample (pore water) did not exceeded the aquatic life water quality objective and this sample will not be included in the exceedance count because the criteria used are specific to water samples, not sediment pore water. Each of the sample sizes are insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed for application of table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40099, Diazinon	**Region 3**
Gazos Creek	

LOE ID:	16875
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40106**	**Region 3**
Gazos Creek		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40106, Dieldrin **Region 3**

Gazos Creek

LOE ID:	16698
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40107 Region 3

Gazos Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40107, Endrin Region 3

Gazos Creek

LOE ID:	16513
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	35860	Region 3
Gazos Creek		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 35860, Fluoranthene **Region 3**

Gazos Creek

LOE ID:	16598
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40105** **Region 3**

Gazos Creek

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40105, Fluorene **Region 3**

Gazos Creek

LOE ID:	16464
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40028 Region 3
Gazos Creek

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40028, Lead Region 3
Gazos Creek

LOE ID:	17310
Pollutant:	Lead

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39672**	**Region 3**
Gazos Creek		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic

invertebrates.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39672, Mercury **Region 3**

Gazos Creek

LOE ID:	17380
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	39739	Region 3
Gazos Creek		

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39739, Naphthalene	**Region 3**
Gazos Creek	

LOE ID:	17213
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39674**	**Region 3**
Gazos Creek		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39674, Nickel — Region 3

Gazos Creek

LOE ID:	17030
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40174 — Region 3

Gazos Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed.

Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40174, Phenanthrene **Region 3**

Gazos Creek

LOE ID:	17117
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-

	Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 39728 Region 3

Gazos Creek

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39728, Pyrene Region 3

Gazos Creek

LOE ID:	16994
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42608**	**Region 3**
Gazos Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.6 at least one line of evidence is necessary to assess listing status and a water segment shall be placed on the section 303(d) List if the water segment exhibits statistically significant water or sediment toxicity using the binomial distribution as described in section 3.1 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. The single sample exceeded the water quality objective for aquatic life uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42608, Toxicity **Region 3**

Gazos Creek

LOE ID:	24211
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1].
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in

	spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40167** **Region 3**

Gazos Creek

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant, including one for sediment toxicity. The single sample does not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses, and the sediment was not toxic to aquatic invertebrates. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40167, Zinc **Region 3**

Gazos Creek

LOE ID:	17901
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Gazos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Gazos Creek was collected at 1 monitoring site [304GAZ-Gazos Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Aptos Creek**
Water Body ID: **CAR3041302320020319065717**
Water Body Type: **River & Stream**

DECISION ID **45635** **Region 3**
Aptos Creek

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. 303(d) listing decisions made prior to 2006 were not held in an assessment database and there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment/pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. Two of the three samples have degraded biological community composition (EPT taxa richness less than 12) associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the three samples have degraded biological community composition (EPT taxa richness less than 12) associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 45635, Sedimentation/Siltation **Region 3**
Aptos Creek

LOE ID: 95241

Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Aptos Creek. At two of the three stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. In addition, less than 12 EPT taxa (EPT richness) were present at two of the three stations indicating degraded biological diversity and community composition at these locations. It is likely that degraded benthic invertebrate community condition is impacted by sediment deposition in this stream.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	Two monitoring locations: Aptos Creek below Aptos Rancho Trail (2008 and 2009), Aptos Creek below Valencia Creek (2007)
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45635, Sedimentation/Siltation **Region 3**

Aptos Creek

LOE ID:	3718
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	**42840**	**Region 3**
Aptos Creek		

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Natural Sources | Other Urban Runoff | Urban Runoff/Storm Sewers
TMDL Name:	Aptos and Valencia Creeks Pathogens
TMDL Project Code:	594
Date TMDL Approved by USEPA:	01/20/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.

This pollutant is being considered for placement on the section 303(d) List under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Twenty-one lines of evidence are available in the administrative record to assess this pollutant. The original decision for this pollutant was made prior to the development of the assessment database and there is only a placeholder LOE (with no data) for that decision. More recent data support this decision. Forty-nine of the 109 fecal coliform samples, 104 of the 176 E. coli samples and 17 of the 39 Enterococcus samples exceed the water quality objective for Water Contact Recreation (i.e. swimming). There is no evidence of impairment to the Non-Contact Recreation use. Twelve of the 109 fecal coliform samples, 104 of the 176 E. coli samples and 17 of the 39 Enterococcus samples exceed the water quality objective for Non-Contact Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification aginst removing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. A TMDL for Pathogens (i.e. Indicator Bacteria) in Aptos and Valencia Creeks was approved the USEPA and is expected to result in attainment of the water quality standards.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-nine of 109 samples exceeded the water quality objective for contact recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Aptos, Valencia, and Trout Gulch Pathogen TMDL has been approved by USEPA.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded. Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	10556
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	49303

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 17 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	10640
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 6 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/20/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	10608
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 9 of 56 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	10607
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	30
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 30 of 56 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	10627
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 18 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/20/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	10542
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	10559
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	10558
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	13915
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT_CCL - Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	13914
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	17
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Aptos Creek to determine beneficial use support and results are as follows: 17 of 39 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for Enterococci in Freshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT_CCL - Aptos Creek at Winfield].
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	14129
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	27
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Aptos Creek to determine beneficial use support and results are as follows: 27 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT_CCL - Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	14130
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Aptos Creek to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT_CCL - Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	19805
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	34
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 34 of 40 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as

	stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 10/13/2000-4/29/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	18518
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	19806
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 10/13/2000-4/29/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	18480
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	49304
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	18
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 18 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	49319
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	3717
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

	2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria **Region 3**

Aptos Creek

LOE ID:	18533
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42840, Indicator Bacteria — Region 3

Aptos Creek

LOE ID:	18495
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 36966 — Region 3

Aptos Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Nine lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Three LOEs summarize unionized ammonia data in which zero of the 104 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Six LOEs summarize total ammonia data and zero of the 145 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 104 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and zero of the 145 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.
These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36966, Ammonia **Region 3**

Aptos Creek

LOE ID:	19703
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 6/11/1998-10/30/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36966, Ammonia **Region 3**

Aptos Creek

LOE ID:	49283
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36966, Ammonia **Region 3**

Aptos Creek

LOE ID:	49260
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	37
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 37 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36966, Ammonia **Region 3**

Aptos Creek

LOE ID:	9144
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36966, Ammonia **Region 3**

Aptos Creek

LOE ID:	17582
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos

	Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36966, Ammonia **Region 3**

Aptos Creek

LOE ID:	9156
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36966, Ammonia **Region 3**

Aptos Creek

LOE ID:	9157
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36966, Ammonia **Region 3**

Aptos Creek

LOE ID:	13988
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT_CCL - Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36966, Ammonia **Region 3**

Aptos Creek

LOE ID:	9145
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	36703	Region 3
Aptos Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 102 samples exceeded the objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36703, Boron	**Region 3**
Aptos Creek	

LOE ID:	49224
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36703, Boron **Region 3**

Aptos Creek

LOE ID:	9158
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro and Big Basin

	Hydrologic Units are one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly, for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36703, Boron **Region 3**

Aptos Creek

LOE ID:	9152
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 49 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36650** **Region 3**

Aptos Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 105 samples exceeded the objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36650, Chloride **Region 3**

Aptos Creek

LOE ID:	9153
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 50 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36650, Chloride **Region 3**

Aptos Creek

LOE ID:	9159
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36650, Chloride **Region 3**

Aptos Creek

LOE ID:	49225
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41457** **Region 3**

Aptos Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the

Conclusion:	Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. None of the 111 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 111 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41457, Chlorophyll-a **Region 3**

Aptos Creek

LOE ID:	9160
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41457, Chlorophyll-a **Region 3**

Aptos Creek

LOE ID:	12115
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41457, Chlorophyll-a **Region 3**

Aptos Creek

LOE ID:	49261
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41457, Chlorophyll-a **Region 3**

Aptos Creek

LOE ID:	9155
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36498	Region 3
Aptos Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed any of the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceeded any of the objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36498, Nitrate	**Region 3**
Aptos Creek	

LOE ID:	18291
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	18306
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]

Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	19939
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	18397
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-22 - Aptos Creek near Aptos Valencia confluence, 304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	18398
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-22 - Aptos Creek near Aptos Valencia confluence, 304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	49227
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]

Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	49244
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	19938

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	49262
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	49263
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	49300
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	49301
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	9146
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for

	Aptos Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	9147
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L

	(NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	9161
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	9162
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	14034
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT_CCL - Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36498, Nitrate **Region 3**

Aptos Creek

LOE ID:	14035
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California

	Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT_CCL - Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID 53536 Region 3
Aptos Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 41 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 41 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53536, Nitrogen, Nitrite Region 3
Aptos Creek

LOE ID:	49245
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**45796**	**Region 3**
Aptos Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Four of the 295 samples exceed the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% and although 5 of 123 samples are below 85% saturation, the median of the data does not exceed (fall below) the Objective. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 295 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the median value did not exceed the General Objective.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	49278
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	49279
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan) when applied as monthly median. Use of a monthly (or 30 day) median value is consistent with guidance in the USEPA Gold Book (1986) to be protective of most fish life stages and anti-degradation.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	12077
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304APS-Aptos Creek at Nisene Marks park road , 304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	12078
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304APS-

	Aptos Creek at Nisene Marks park road , 304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	12094
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	19731

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 3 of 28 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	12059
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	12248
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five

	annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	18157
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	17995
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	135
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 135 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45796, Oxygen, Dissolved **Region 3**

Aptos Creek

LOE ID:	12095
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 3 of 57 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 45636 Region 3

Aptos Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Eight of the 105 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of the 105 samples exceeded the Agriculture Supply objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 45636, Sodium Region 3

Aptos Creek

LOE ID:	9163
Pollutant:	Sodium

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45636, Sodium **Region 3**

Aptos Creek

LOE ID:	9154
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 6 of 50 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45636, Sodium **Region 3**

Aptos Creek

LOE ID:	49247
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 45637 Region 3

Aptos Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Ten of the 260 samples exceed the water quality objective. Note that the pollutant name for the older LOEs is electrical conductivity. This was an error and they pollutant name should have always been specific conductivity. For this reason, all three of the LOEs are combined into this assessment for specific conductivity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 260 samples exceeded the agriculture supply objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 45637, Specific Conductivity Region 3

Aptos Creek

LOE ID:	10557
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45637, Specific Conductivity **Region 3**

Aptos Creek

LOE ID:	17496
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45637, Specific Conductivity **Region 3**

Aptos Creek

LOE ID:	17389
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45637, Specific Conductivity **Region 3**

Aptos Creek

LOE ID:	17531
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	137
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 137 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45637, Specific Conductivity **Region 3**

Aptos Creek

LOE ID:	18586
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	31
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 7 of 31 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 3/2/1992-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45637, Specific Conductivity **Region 3**

Aptos Creek

LOE ID:	10577
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304APS-Aptos Creek at Nisene Marks park road , 304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 45637, Specific Conductivity **Region 3**

Aptos Creek

LOE ID:	49226
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 45637, Specific Conductivity **Region 3**

Aptos Creek

LOE ID:	10609
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	57
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 57 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37077** **Region 3**

Aptos Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Zero of the 307 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 307 samples exceeded the evaluation guideline (Moyle 1976) as it is applied to cold and warm freshwater habitat objectives. This does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37077, Temperature, water **Region 3**

Aptos Creek

LOE ID:	18746
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	140
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 140 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37077, Temperature, water **Region 3**

Aptos Creek

LOE ID:	18747
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37077, Temperature, water — Region 3

Aptos Creek

LOE ID:	19916
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 3/2/1992-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37077, Temperature, water — Region 3

Aptos Creek

LOE ID:	49282
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37077, Temperature, water **Region 3**

Aptos Creek

LOE ID:	12098
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37077, Temperature, water **Region 3**

Aptos Creek

LOE ID:	12079
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304APS-Aptos Creek at Nisene Marks park road , 304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37077, Temperature, water **Region 3**

Aptos Creek

LOE ID:	12075
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36959** **Region 3**

Aptos Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five line(s) of evidence is available in the administrative record to assess this pollutant. Ten of the 133 samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 133 samples exceeded the evaluation guideline as established by Sigler et al. (1984) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36959, Turbidity **Region 3**

Aptos Creek

LOE ID:	12076
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-

	Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 9/8/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36959, Turbidity **Region 3**

Aptos Creek

LOE ID:	12097
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 6 of 49 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36959, Turbidity **Region 3**

Aptos Creek

LOE ID:	12114

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36959, Turbidity **Region 3**

Aptos Creek

LOE ID:	49281
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36959, Turbidity **Region 3**

Aptos Creek

LOE ID:	19327
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 33 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [

	304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 10/18/2001-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **36969** **Region 3**

Aptos Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eleven lines of evidence is available in the administrative record to assess this pollutant. Twenty-five of the 295 samples exceed the maximum pH water quality objective for Municipal and Domestic Supply, Contact and Non-contact Recreation beneficial uses. Four of the 295 samples exceed the maximum pH water quality objective for Cold Freshwater Habitat and 11 of 295 samples exceeded the Agriculture Supply objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No more than 25 of the 295 samples exceeded water quality objectives for maximum pH and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18938
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18939
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-

	APTOS-23 - Aptos Creek At Mouth, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18957
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18958
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18045
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	137
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 137 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	19653
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	19635
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	19636
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	19637
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	19638
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT_SCC - APTOS CREEK at MOUTH, 304APV_SCC - APTOS C at VALENCIA C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	49302
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	49318
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	49320
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	49280
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	49246
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan

	(page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APT-Aptos Creek at Spreckles Drive]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10573
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10574
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10575
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10576
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 4 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10560
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 1 monitoring site [304APS-Aptos Creek at Nisene Marks park road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH — Region 3

Aptos Creek

LOE ID:	10594
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304APS-Aptos Creek at Nisene Marks park road , 304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH — Region 3

Aptos Creek

LOE ID:	10590
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304APS-Aptos Creek at Nisene Marks park road , 304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10591
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304APS-Aptos Creek at Nisene Marks park road , 304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10592
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304APS-Aptos Creek at Nisene Marks park road , 304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10593
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Aptos Creek to determine beneficial use support and results are as follows: 5 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304APS-Aptos Creek at Nisene Marks park road , 304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10610
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 7 of 56 samples

	exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10623
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10624
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 11 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10625
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 11 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	10626
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Aptos Creek to determine beneficial use support and results are as follows: 11 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 2 monitoring sites [304APT-Aptos Creek at Spreckles Drive, 304APW-Aptos Creek at Winfield]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18025
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	137
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 137 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-

	APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18042
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	137
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 2 of 137 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18043
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	137
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 137 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18044
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	137
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Aptos Creek to determine beneficial use support and results are as follows: 1 of 137 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 4 monitoring sites [304-APTOS-24 - Aptos Creek At Spreckles Drive, 304-APTOS-25 - Aptos Creek at Aptos Village Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-21 - Aptos Creek Nisene Marks State Park]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36969, pH **Region 3**

Aptos Creek

LOE ID:	18937
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Aptos Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Aptos Creek was collected at 3 monitoring sites [304-APTOS-23 - Aptos Creek At Mouth, 304-APTOS-21 - Aptos Creek Nisene Marks State Park, 304-APTOS-22 - Aptos Creek near Aptos Valencia confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Trout Creek Gulch**
Water Body ID: **CAR3041302320020124151701**
Water Body Type: **River & Stream**

DECISION ID **50136** **Region 3**
Trout Creek Gulch

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Aptos and Valencia Creeks Pathogens
TMDL Project Code:	594
Date TMDL Approved by USEPA:	01/20/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Sixty-nine of 90 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Sixty-nine of 90 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Aptos Creek, Valencia Creek, and Trout Gulch Pathogen TMDL has been approved by USEPA on 01/20/2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50136, Fecal Coliform **Region 3**
Trout Creek Gulch

LOE ID:	58587
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	90
Number of Exceedances:	69
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Sixty-nine of the 90 samples exceeded the fecal coliform objective.
Data Reference:	Data from San Lorenzo River Estuary Watershed TMDL for Pathogens and the Aptos/Valencia Creek TMDL for Pathogens, May 2000-Aug. 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	In waters designated for contact recreation (REC-1), the fecal coliform concentration shall not exceed 400/100ml. Central Coast Region Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected from twelve stations along Trout Gulch. This stretch of Trout Creek Gulch is only 537 meters long and most of the stations were within 200 meters of each other. Since there was no easy way to separate or combine these stations, they were counted as individual sample points. The majority of the results exceeded the objective for fecal coliform. Station A118 was added to this WB. Station A11 was added to this water body (it's currently mapped to Valencia Creek). CAR3041302320020124151701
Temporal Representation:	Samples were collected quarterly to monthly from 2000 to 2005.
Environmental Conditions:	
QAPP Information:	Samples were collected under Quality Assurance Project Plan Assessment of Nonpoint Sources of Beach Contamination Monitoring of Santa Cruz Mainbeach Water Quality Improvements and Related Efforts.
QAPP Information Reference(s):	

DECISION ID	**37932**	**Region 3**
Trout Creek Gulch		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant total ammonia. This decision contains all of the LOEs from the previous decision. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 2

samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 2 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37932, Ammonia **Region 3**

Trout Creek Gulch

LOE ID:	17586
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 7/6/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.

QAPP Information Reference(s):

DECISION ID	38125	Region 3
Trout Creek Gulch		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Two of 2 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 2 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 2 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 2 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38125, Escherichia coli (E. coli)	**Region 3**
Trout Creek Gulch	

LOE ID:	18482
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 7/6/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38125, Escherichia coli (E. coli) **Region 3**

Trout Creek Gulch

LOE ID:	18481
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 7/6/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 38110 Region 3

Trout Creek Gulch

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Municipal & Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 2 samples exceed the Municipal & Domestic Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38110, Nitrate Region 3

Trout Creek Gulch

LOE ID:	18262
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 7/6/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**38111**	**Region 3**
Trout Creek Gulch		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 4 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 0 of the 4 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38111, Oxygen, Dissolved **Region 3**

Trout Creek Gulch

LOE ID:	18036
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 8/24/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38111, Oxygen, Dissolved **Region 3**

Trout Creek Gulch

LOE ID:	18035
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 8/24/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	38018	Region 3
Trout Creek Gulch		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 5 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38018, Temperature, water **Region 3**

Trout Creek Gulch

LOE ID:	18783
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 8/24/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams

Program staff) prior to assessment of data.

QAPP Information Reference(s):

DECISION ID	37937	Region 3
Trout Creek Gulch		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed any of the water quality objectives. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed any of the water quality objectives. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37937, pH	Region 3
Trout Creek Gulch	

LOE ID:	18180
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 8/24/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37937, pH **Region 3**

Trout Creek Gulch

LOE ID:	18165
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 8/24/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37937, pH **Region 3**

Trout Creek Gulch

LOE ID:	18183
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 8/24/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37937, pH **Region 3**

Trout Creek Gulch

LOE ID:	18182
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 8/24/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37937, pH **Region 3**

Trout Creek Gulch

LOE ID:	18181
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Trout Creek (304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Trout Creek (304) was collected at 1 monitoring site [304-TROUT-21 - Trout Gulch Trib/Valencia School]
Temporal Representation:	Data was collected over the time period 8/24/2004-11/9/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Valencia Creek**
Water Body ID: **CAR3041302319980827104158**
Water Body Type: **River & Stream**

DECISION ID **37606** **Region 3**
Valencia Creek

Pollutant: **Pathogens**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This decision for the general category of 'Pathogens' is being replaced by individual decisions for each of the Indicator Bacteria for which there are data, such as E. coli and fecal coliform. Those individual decisions replace this generic decision.

This decision for 'Pathogens' was made prior to 2006 and the supporting data and other information are not held in an assessment database. The historic administrative record does not include specific data for this decision.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision for the general category of 'Pathogens' is being replaced by individual decisions for each of the fecal indicator bacteria for which there are data.

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**
Valencia Creek

LOE ID: 19862

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference: Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996
Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 4/13/2001-8/13/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	19861
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 4/13/2001-8/13/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the

	dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	18547
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	18532
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12

Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	18419
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	10133
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	10402
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 11 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	10403
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 3 of 14 samples

	exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	4018
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	10132
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 11 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37606, Pathogens **Region 3**

Valencia Creek

LOE ID:	18404
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**53513**	**Region 3**
Valencia Creek		

Pollutant:	**Alkalinity as CaCO3**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53513, Alkalinity as CaCO3 — Region 3

Valencia Creek

LOE ID:	58921
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 37394 — Region 3

Valencia Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two

LOEs summarize unionized ammonia data in which zero of the 16 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Four LOEs summarize total ammonia data and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 16 samples exceed the water quality objective for unionized ammonia and zero of the 29 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37394, Ammonia **Region 3**

Valencia Creek

LOE ID:	58922
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37394, Ammonia **Region 3**

Valencia Creek

LOE ID:	58923
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37394, Ammonia **Region 3**

Valencia Creek

LOE ID:	19746
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-

	1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected on a single day 6/11/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37394, Ammonia **Region 3**

Valencia Creek

LOE ID:	9226
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]

Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37394, Ammonia **Region 3**

Valencia Creek

LOE ID:	17565
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37394, Ammonia **Region 3**

Valencia Creek

LOE ID:	9227
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37000**	**Region 3**
Valencia Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 49 samples exceed the Municipal & Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 49 samples exceed the Municipal & Domestic Supply water quality objective, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37000, Nitrate **Region 3**

Valencia Creek

LOE ID:	18526
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37000, Nitrate **Region 3**

Valencia Creek

LOE ID:	9277
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37000, Nitrate **Region 3**

Valencia Creek

LOE ID:	18392
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37000, Nitrate **Region 3**

Valencia Creek

LOE ID:	19633
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride

	concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37000, Nitrate **Region 3**

Valencia Creek

LOE ID:	58935
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **53514** **Region 3**

Valencia Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 2 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 2 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53514, Nitrogen, Nitrite **Region 3**

Valencia Creek

LOE ID:	58936
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 37001 Region 3

Valencia Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One of the 133 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 133 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37001, Oxygen, Dissolved Region 3

Valencia Creek

LOE ID:	58938
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37001, Oxygen, Dissolved **Region 3**

Valencia Creek

LOE ID:	11935
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 8/29/2005-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37001, Oxygen, Dissolved **Region 3**

Valencia Creek

LOE ID:	18032
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	91
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 91 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37001, Oxygen, Dissolved **Region 3**

Valencia Creek

LOE ID:	18170
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37001, Oxygen, Dissolved **Region 3**

Valencia Creek

LOE ID:	19751
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37001, Oxygen, Dissolved **Region 3**

Valencia Creek

LOE ID:	11915
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37001, Oxygen, Dissolved — Region 3

Valencia Creek

LOE ID:	11916
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37001, Oxygen, Dissolved — Region 3

Valencia Creek

LOE ID:	11919
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 8/29/2005-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37119**	**Region 3**
Valencia Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 142 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 142 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37119, Temperature, water **Region 3**

Valencia Creek

LOE ID:	19600
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37119, Temperature, water **Region 3**

Valencia Creek

LOE ID:	18577
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37119, Temperature, water **Region 3**

Valencia Creek

LOE ID:	11936
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 8/29/2005-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37119, Temperature, water **Region 3**

Valencia Creek

LOE ID:	11917
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]

Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37119, Temperature, water **Region 3**

Valencia Creek

LOE ID:	18780
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	97
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 97 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37119, Temperature, water **Region 3**

Valencia Creek

LOE ID:	58955
Pollutant:	Temperature, water

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **37484** **Region 3**

Valencia Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-four lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. Zero of the 138 samples exceed the water quality objective for Cold Freshwater Habitat, and 3 of the 138 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 138 samples exceed the water quality objective for Cold Freshwater Habitat, and 3 of the 138 samples exceed the water quality objectives for Drinking Water and Recreation, None of these

exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	18123
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 92 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	19694
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	19695
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	19696
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	10152
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	10135
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples

	exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	10156
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]

Temporal Representation:	Data was collected over the time period 8/29/2005-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	10136
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	19128
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	19129
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither

	be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	10154
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 8/29/2005-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	10153
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 8/29/2005-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	10155
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 8/29/2005-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	10134
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]

Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	19131
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	19130
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	19693
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 6/11/1998-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	18124
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 92 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	18125
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 92 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	18126
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 92 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/20/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	58942
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	58941

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	58939
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 37484, pH **Region 3**

Valencia Creek

LOE ID:	58940
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Valencia Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [Valencia Creek - 304PS0006]
Temporal Representation:	Data was collected over the time period 6/4/2008-6/17/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **50164** **Region 3**

Valencia Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Aptos and Valencia Creeks Pathogens
TMDL Project Code:	594
Date TMDL Approved by USEPA:	01/20/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This is a new/revised decision to replace the decisions made for the generic pollutant category of 'Pathogen'. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of

the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Eleven of 14 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 3 of 14 samples exceed the water quality objective for non-contact recreation. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eleven of 14 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50164, Fecal Coliform **Region 3**

Valencia Creek

LOE ID:	10403
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 3 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50164, Fecal Coliform **Region 3**

Valencia Creek

LOE ID:	10402
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 11 of 14 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38664	Region 3
Valencia Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38664, Chlorophyll-a	**Region 3**
Valencia Creek	

LOE ID:	9276
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39290**	**Region 3**
Valencia Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Four of the 27 samples exceed the Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 27 samples exceed the Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing

Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39290, Turbidity **Region 3**

Valencia Creek

LOE ID:	19354
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 1 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 2/15/2000-5/8/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39290, Turbidity **Region 3**

Valencia Creek

LOE ID:	11918
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 8/11/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**50159**	**Region 3**
Valencia Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This is a new/revised decision to replace the decisions made for the generic pollutant category of 'Pathogen'. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Twenty-seven of 34 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 2 of 34 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-seven of 34 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50159, Escherichia coli (E. coli) **Region 3**

Valencia Creek

LOE ID:	19862
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]

Temporal Representation:	Data was collected over the time period 4/13/2001-8/13/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50159, Escherichia coli (E. coli) **Region 3**

Valencia Creek

LOE ID:	19861
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Valencia Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL_SCC - VALENCIA C at APTOS C]
Temporal Representation:	Data was collected over the time period 4/13/2001-8/13/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50159, Escherichia coli (E. coli) **Region 3**

Valencia Creek

LOE ID:	18547
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation

Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50159, Escherichia coli (E. coli) **Region 3**

Valencia Creek

LOE ID:	18532
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Valencia Creek to determine beneficial use support and results are as follows: 11 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)

Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 3 monitoring sites [304-VALEN-23 - Valencia Elementary School, 304-VALEN-24 - Aptos Polo Fields, 304-VALEN-24 - Aptos Polo Fields]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50159, Escherichia coli (E. coli) **Region 3**

Valencia Creek

LOE ID:	18419
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50159, Escherichia coli (E. coli) **Region 3**

Valencia Creek

LOE ID:	10133

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50159, Escherichia coli (E. coli) **Region 3**

Valencia Creek

LOE ID:	18404
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Valencia Creek to determine beneficial use support and results are as follows: 3 of 5 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 2 monitoring sites [304-VALEN-21 - Valencia Creek at culvert off Valencia Cr Rd., 304-VALEN-22 - Valencia Creek At Valencia/Aptos confluence]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50159, Escherichia coli (E. coli) **Region 3**

Valencia Creek

LOE ID:	10132
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Valencia Creek to determine beneficial use support and results are as follows: 11 of 14 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Valencia Creek was collected at 1 monitoring site [304VAL-Valencia Creek u/s Aptos Creek Confluence]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	32539	Region 3
Valencia Creek		

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32539, Sedimentation/Siltation	**Region 3**
Valencia Creek	

LOE ID:	4019
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Soquel Creek**
Water Body ID: **CAR3041301420020124145258**
Water Body Type: **River & Stream**

DECISION ID **39145** **Region 3**
Soquel Creek

Pollutant: **Turbidity**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Twenty-nine of the 184 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-nine of the 184 samples exceed the evaluation guideline for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 39145, Turbidity **Region 3**
Soquel Creek

LOE ID: 52545

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 41
Number of Exceedances: 5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39145, Turbidity **Region 3**

Soquel Creek

LOE ID:	17619
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.

Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation:	Data was collected on a single day 8/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39145, Turbidity **Region 3**

Soquel Creek

LOE ID:	12136
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	51
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 6 of 51 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39145, Turbidity **Region 3**

Soquel Creek

LOE ID:	19231

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	79
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 16 of 79 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 12/11/2001-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39145, Turbidity **Region 3**

Soquel Creek

LOE ID:	12155
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39145, Turbidity **Region 3**

Soquel Creek

LOE ID:	11898
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36829	Region 3
Soquel Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Domestic Pet Waste | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Soquel Lagoon Pathogens
TMDL Project Code:	593
Date TMDL Approved by USEPA:	11/17/2010
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. One-hundred-three of 217 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 6 of 177 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One-hundred-three of 217 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The Soquel Lagoon Pathogens TMDL has been approved by USEPA. 5. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli)	**Region 3**
Soquel Creek	

LOE ID:	52567
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 6 of 40 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) **Region 3**

Soquel Creek

LOE ID:	10382
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) Region 3

Soquel Creek

LOE ID:	14073
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOQ_CCL - Soquel Creek at RR Bridge]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) **Region 3**

Soquel Creek

LOE ID:	14072
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	20
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Soquel Creek to determine beneficial use support and results are as follows: 20 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOQ_CCL - Soquel Creek at RR Bridge]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) **Region 3**

Soquel Creek

LOE ID:	18319
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and

	results are as follows: 0 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-21 - Soquel Creek At Nob Hill, 304-SOQUE-22 - Soquel Creek At Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) Region 3

Soquel Creek

LOE ID:	10323
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 9 of 26 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK-Soquel Creek at Nob Hill]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is

	ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) **Region 3**

Soquel Creek

LOE ID:	10324
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	26
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 26 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK-Soquel Creek at Nob Hill]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) **Region 3**

Soquel Creek

LOE ID:	10381
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) **Region 3**

Soquel Creek

LOE ID:	19842
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	91
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 5 of 91 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 5/2/2001-8/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) Region 3

Soquel Creek

LOE ID:	19826
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	91
Number of Exceedances:	65
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 65 of 91 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 5/2/2001-8/14/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36829, Escherichia coli (E. coli) **Region 3**

Soquel Creek

LOE ID:	18318
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-21 - Soquel Creek At Nob Hill, 304-SOQUE-22 - Soquel Creek At Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **36928** **Region 3**

Soquel Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Pet Waste | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Soquel Lagoon Pathogens
TMDL Project Code:	593
Date TMDL Approved by USEPA:	11/17/2010
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2, 4.2 and 4.3 of the Listing Policy. Under 4.3 of the Policy, a minimum of one line of evidence is needed to

assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. Twenty-eight of 113 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 3 of 113 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-eight of 113 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Soquel Lagoon Pathogen TMDL has been approved by USEPA on 11/17/2010.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 36928, Fecal Coliform **Region 3**

Soquel Creek

LOE ID:	10305
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	20
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 20 of 58 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Nob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36928, Fecal Coliform **Region 3**

Soquel Creek

LOE ID:	10366
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36928, Fecal Coliform **Region 3**

Soquel Creek

LOE ID:	10306
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	58
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 2 of 58 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Nob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36928, Fecal Coliform **Region 3**

Soquel Creek

LOE ID:	10367
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel

	Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36928, Fecal Coliform **Region 3**

Soquel Creek

LOE ID:	52569
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	40
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36928, Fecal Coliform **Region 3**

Soquel Creek

LOE ID:	52566
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 7 of 40 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 39195 Region 3

Soquel Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Three LOEs summarize unionized ammonia data in which zero of the 110 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Six LOEs summarize total ammonia data and zero of the 140 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 110 samples exceed the water quality objective for unionized ammonia and zero of the 140 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39195, Ammonia — Region 3

Soquel Creek

LOE ID:	9251
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39195, Ammonia **Region 3**

Soquel Creek

LOE ID:	9250
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]

Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39195, Ammonia **Region 3**

Soquel Creek

LOE ID:	19702
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 10/10/2001-10/30/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39195, Ammonia **Region 3**

Soquel Creek

LOE ID:	17836
Pollutant:	Ammonia as Nitrogen

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation:	Data was collected on a single day 8/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39195, Ammonia **Region 3**

Soquel Creek

LOE ID:	13973
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).

Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOQ_CCL - Soquel Creek at RR Bridge]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39195, Ammonia **Region 3**

Soquel Creek

LOE ID:	9243
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39195, Ammonia **Region 3**

Soquel Creek

LOE ID:	9242
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39195, Ammonia **Region 3**

Soquel Creek

LOE ID:	52547
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to

	determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39195, Ammonia **Region 3**

Soquel Creek

LOE ID:	52509
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK -

	304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51715** **Region 3**

Soquel Creek

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51715, Arsenic **Region 3**

Soquel Creek

LOE ID:	58841

Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51603** **Region 3**

Soquel Creek

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is

set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51603, Bifenthrin **Region 3**

Soquel Creek

LOE ID:	58842
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]

Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 36607 Region 3

Soquel Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 106 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 106 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36607, Boron Region 3

Soquel Creek

LOE ID:	52638
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Boron, dissolved.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36607, Boron **Region 3**

Soquel Creek

LOE ID:	9252
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36607, Boron **Region 3**

Soquel Creek

LOE ID:	9244
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 50 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Nob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **51793** **Region 3**

Soquel Creek

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51793, Cadmium — Region 3

Soquel Creek

LOE ID:	58682
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51799**	**Region 3**
Soquel Creek		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51799, Chlordane **Region 3**

Soquel Creek

LOE ID:	58683
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36608** **Region 3**

Soquel Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 106 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 106 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36608, Chloride **Region 3**

Soquel Creek

LOE ID:	52639
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36608, Chloride **Region 3**

Soquel Creek

LOE ID:	9253
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36608, Chloride **Region 3**

Soquel Creek

LOE ID:	9245
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 6 of 50 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Nob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**39134**	**Region 3**
Soquel Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 116 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 116 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39134, Chlorophyll-a **Region 3**

Soquel Creek

LOE ID:	9246
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39134, Chlorophyll-a **Region 3**

Soquel Creek

LOE ID:	9254
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39134, Chlorophyll-a **Region 3**

Soquel Creek

LOE ID:	12156
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39134, Chlorophyll-a **Region 3**

Soquel Creek

LOE ID:	52510
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **48913** **Region 3**

Soquel Creek

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample does not exceed the aquatic life evaluation guideline (Amweg and Weston, 2007) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48913, Chlorpyrifos **Region 3**

Soquel Creek

LOE ID:	58684
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.

Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51805**	**Region 3**
Soquel Creek		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life. This does not

exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51805, Chromium **Region 3**

Soquel Creek

LOE ID:	58685
Pollutant:	Chromium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51814** **Region 3**

Soquel Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline for aquatic life. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51814, Copper **Region 3**

Soquel Creek

LOE ID:	58686
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall

	be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for copper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	51604	Region 3
Soquel Creek		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51604, Cyfluthrin **Region 3**

Soquel Creek

LOE ID:	58696
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyfluthrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51605** **Region 3**

Soquel Creek

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and

Conclusion:	3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51605, Cyhalothrin, Lambda **Region 3**

Soquel Creek

LOE ID:	58697
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51606** **Region 3**

Soquel Creek

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51606, Cypermethrin **Region 3**

Soquel Creek

LOE ID:	58698
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cypermethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **53500** **Region 3**

Soquel Creek

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to

result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53500, DDD (Dichlorodiphenyldichloroethane) Region 3

Soquel Creek

LOE ID:	58699
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDD.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 53501 Region 3

Soquel Creek

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53501, DDE (Dichlorodiphenyldichloroethylene) Region 3

Soquel Creek

LOE ID:	58711
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDE.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**53502**	**Region 3**
Soquel Creek		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53502, DDT (Dichlorodiphenyltrichloroethane) Region 3

Soquel Creek

LOE ID:	58712
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 53502, DDT (Dichlorodiphenyltrichloroethane) Region 3
Soquel Creek

LOE ID:	58750
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51607 Region 3
Soquel Creek

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing

status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51607, Deltamethrin **Region 3**

Soquel Creek

LOE ID:	58713
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79

	ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47358**	**Region 3**
Soquel Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the aquatic life evaluation guideline (Ding et al. 2011). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No samples exceeded the evaluation guideline (Ding, et al. 2011) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47358, Diazinon **Region 3**

Soquel Creek

LOE ID:	58714
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51851** **Region 3**

Soquel Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51851, Dieldrin **Region 3**

Soquel Creek

LOE ID:	58723
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater

ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 51880 Region 3

Soquel Creek

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51880, Endrin Region 3

Soquel Creek

LOE ID:	58724

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51608**	**Region 3**
Soquel Creek		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples

is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51608, Esfenvalerate/Fenvalerate **Region 3**

Soquel Creek

LOE ID:	58725
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Esfenvalerate/Fenvalerate, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel

	Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **51610** **Region 3**

Soquel Creek

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51610, Fenpropathrin **Region 3**

Soquel Creek

LOE ID:	58726
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenpropathrin.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**51991**	**Region 3**
Soquel Creek		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51991, Lead **Region 3**

Soquel Creek

LOE ID:	58735
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	51994	Region 3
Soquel Creek		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51994, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	**Region 3**
Soquel Creek	

LOE ID:	58736
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**52015**	**Region 3**
Soquel Creek		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52015, Mercury **Region 3**

Soquel Creek

LOE ID:	58737
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52060** **Region 3**

Soquel Creek

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52060, Methyl Parathion **Region 3**

Soquel Creek

LOE ID:	58738
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Methyl.
Data Reference:	Statewide Stream Pollution Trends Study 2008

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**52067**	**Region 3**
Soquel Creek		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52067, Nickel **Region 3**

Soquel Creek

LOE ID:	58739
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36942** **Region 3**

Soquel Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. Three of the 170 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. The most recent 41 samples (collected between January 2007 and June 2010), are also evaluated using the Central Coast RegionÂ's evaluation guideline for maximum nitrate concentration (R3 NNE Technical Report, 2010) and the protection of aquatic life uses from bio-stimulatory or eutrophic effects (i.e. enhanced algal and aquatic plant growth and unhealthy dissolved oxygen fluctuations). Zero of the 41 samples exceed the evaluation guideline and there is no supporting evidence indicating high risk for, or occurrence of, eutrophication (such as low dissolved oxygen or elevated chlorophyll a concentrations). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 170 nitrate samples exceed the water quality objectives for municipal and domestic supply use (i.e. drinking water) and agricultural uses. Zero of the 41 samples exceed the evaluation guideline and there is no supporting evidence indicating high risk for, or occurrence of, eutrophication. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	52527
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	52355
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	52354
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	52549

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	52526
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	52564
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	9255
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	17762
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation:	Data was collected on a single day 8/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	9224
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	14015
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	43
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Soquel Creek to determine beneficial use support and results are as follows: 3 of 43 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [

	304SOQ_CCL - Soquel Creek at RR Bridge]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	14016
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	43
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Soquel Creek to determine beneficial use support and results are as follows: 4 of 43 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOQ_CCL - Soquel Creek at RR Bridge]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	9247
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	18128
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic

	supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-21 - Soquel Creek At Nob Hill, 304-SOQUE-22 - Soquel Creek At Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	19922
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 6/11/1998-10/21/2002.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	17761
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation:	Data was collected on a single day 8/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	18399
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-21 - Soquel Creek At Nob Hill, 304-SOQUE-22 - Soquel Creek At Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	9248
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	57
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 57 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed

	in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36942, Nitrate **Region 3**

Soquel Creek

LOE ID:	19937
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 6/11/1998-10/21/2002.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 53503 Region 3
Soquel Creek

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 41 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 41 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53503, Nitrogen, Nitrite Region 3
Soquel Creek

LOE ID:	52356
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.

Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**36943**	**Region 3**
Soquel Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Five of the 210 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 210 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID:	52528
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID:	52529
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 2 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID:	19723
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	76
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 5 of 76 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation: Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID: 12119

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Cold Freshwater Habitat
Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 58
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Oxygen, Dissolved.
Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation: Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID: 12120

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 3 of 58 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID:	11895
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID:	11896
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-

	Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID:	12139
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 3 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels, 304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID:	12138

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 3 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels, 304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID:	18230
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-22 - Soquel Creek At Mouth, 304-SOQUE-21 - Soquel Creek At Nob Hill]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36943, Oxygen, Dissolved **Region 3**

Soquel Creek

LOE ID:	17894
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation:	Data was collected on a single day 8/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	52097	Region 3
Soquel Creek		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment samples did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment samples did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52097, PCBs (Polychlorinated biphenyls)	**Region 3**
Soquel Creek	

LOE ID:	58748
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 1 sample collected for Total PCBs exceeded the evaluation guideline.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses (Water Quality Control Plan for the Central Coast Basin).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total PCB is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data were collected at the following station 304SOKxxx (304SOKxxx - Soquel Creek at Knob Hill Parking Lot).
Temporal Representation:	The samples were collected on 7/21/2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51611** **Region 3**

Soquel Creek

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at least one line of evidence is necessary to assess listing status, but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51611, Permethrin, total **Region 3**

Soquel Creek

LOE ID:	58749
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Permethrin, total.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36849** **Region 3**

Soquel Creek

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seven of the 106 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 106 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36849, Sodium **Region 3**

Soquel Creek

LOE ID:	52508
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK -

	304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36849, Sodium **Region 3**

Soquel Creek

LOE ID:	9249
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 6 of 50 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36849, Sodium **Region 3**

Soquel Creek

LOE ID:	9225
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36828**	**Region 3**
Soquel Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Note that the

pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Thirteen of the 208 samples exceed the water quality objective for agricultural uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of the 208 samples exceed the water quality objective for agricultural uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36828, Specific Conductivity **Region 3**

Soquel Creek

LOE ID:	10380
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]

Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36828, Specific Conductivity **Region 3**

Soquel Creek

LOE ID:	10345
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 3 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels, 304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36828, Specific Conductivity **Region 3**

Soquel Creek

LOE ID:	19764

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	76
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 10 of 76 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36828, Specific Conductivity **Region 3**

Soquel Creek

LOE ID:	17608
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and

	results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-22 - Soquel Creek At Mouth, 304-SOQUE-21 - Soquel Creek At Nob Hill]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36828, Specific Conductivity **Region 3**

Soquel Creek

LOE ID:	10307
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	58
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 2 of 58 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]

Temporal Representation: Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36828, Specific Conductivity **Region 3**

Soquel Creek

LOE ID: 17906

Pollutant: Electrical Conductivity

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 1

Number of Exceedances: 1

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).

Data Reference: Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A
Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]

Temporal Representation: Data was collected on a single day 8/23/2006.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36828, Specific Conductivity **Region 3**

Soquel Creek

LOE ID: 52353

Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **36850** **Region 3**

Soquel Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Four of the 211 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of the 211 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36850, Temperature, water **Region 3**

Soquel Creek

LOE ID:	52546
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 36850, Temperature, water **Region 3**

Soquel Creek

LOE ID:	11899
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36850, Temperature, water **Region 3**

Soquel Creek

LOE ID:	12137
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 3 of 58 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36850, Temperature, water **Region 3**

Soquel Creek

LOE ID:	12153
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan,

	Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 3 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels, 304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/22/2006. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36850, Temperature, water **Region 3**

Soquel Creek

LOE ID:	18614
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-22 - Soquel Creek At Mouth, 304-SOQUE-21 - Soquel Creek At Nob Hill]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36850, Temperature, water **Region 3**

Soquel Creek

LOE ID:	17434
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation:	Data was collected on a single day 8/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36850, Temperature, water **Region 3**

Soquel Creek

LOE ID:	19570
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	77
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 77 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**53504**	**Region 3**
Soquel Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the two sediment samples exceed the resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the two sediment samples resulted in a significant toxic effect to one or more test organisms and therefore does not exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53504, Toxicity **Region 3**

Soquel Creek

LOE ID:	58751
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station 304SOKxxx.
Temporal Representation:	The sample was collected in July 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53504, Toxicity **Region 3**

Soquel Creek

LOE ID:	80364
Pollutant:	Toxicity

LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate sediment toxicity. The sample did not exhibit significant toxicity. The toxicity test included survival and growth of Hyalella azteca. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	
Spatial Representation:	The sample was collected at station 304SOKxxx.
Temporal Representation:	The sample was collected in July 2008.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	

DECISION ID **52329** **Region 3**

Soquel Creek

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample did not exceed the evaluation guideline for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sediment sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52329, Zinc **Region 3**

Soquel Creek

LOE ID:	58752
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Statewide Stream Pollution Trends Study 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coast Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity for sediment-dwelling organisms) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [Soquel Creek at Knob Hill Parking Lot - 304SOKxxx]
Temporal Representation:	Data was collected on a single day 7/21/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	SWAMP data collected before September 2008 followed the QAMP (2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	37040	Region 3
Soquel Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Five of the 206 samples exceed the water quality objectives for Cold Freshwater Habitat, 11 of the 206 samples exceed the water quality objectives for Agricultural Supply, and 20 of the 206 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 206 samples exceed the water quality objectives for Cold Freshwater Habitat, 11 of the 206 samples exceed the water quality objectives for Agricultural Supply, and 20 of the 206 samples exceed the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37040, pH	**Region 3**
Soquel Creek	

LOE ID:	52507
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	52565
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 4 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	52583
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 4 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	52530
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	52568
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Soquel Creek to determine beneficial use support and results are as follows: 4 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOK - 304SOK-Soquel Creek at Knob Hill]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10343
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 7 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10346
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 3 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels, 304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10347
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 3 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels, 304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10326
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	58
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 2 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10327
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	58
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 7 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10400
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10401
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10325
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	58
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 6 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10383
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10384
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	17431
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation:	Data was collected on a single day 8/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	17432
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation:	Data was collected on a single day 8/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	17446

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation:	Data was collected on a single day 8/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	17447
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor

raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation: Data was collected on a single day 8/23/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID: 17448

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A
Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [SQ-PRE]
Temporal Representation: Data was collected on a single day 8/23/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID: 10399

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Soquel Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10365
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water

	recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 3 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels, 304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10364
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 3 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels, 304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10363
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 3 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels, 304SOU-Soquel Creek at Soquel Creek Road]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/30/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19053
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-22 - Soquel Creek At Mouth, 304-SOQUE-21 - Soquel Creek At Nob Hill]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19035
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-22 - Soquel Creek At Mouth, 304-SOQUE-21 - Soquel Creek At Nob Hill]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19033
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-22 - Soquel Creek At Mouth, 304-SOQUE-21 - Soquel Creek At Nob Hill]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19034
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-22 - Soquel Creek At Mouth, 304-SOQUE-21 - Soquel Creek At Nob Hill]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19052
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304-SOQUE-22 - Soquel Creek At Mouth, 304-SOQUE-21 - Soquel Creek At Nob Hill]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19850
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	76
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 2 of 76 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19867
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	76
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 3 of 76 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19866
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	76
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 3 of 76 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19868
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	76
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 3 of 76 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	19851
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	76
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Soquel Creek to determine beneficial use support and results are as follows: 1 of 76 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SQF_SCC - SOQUEL CR at FLUME OUTLET]
Temporal Representation:	Data was collected over the time period 6/11/1998-4/25/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37040, pH **Region 3**

Soquel Creek

LOE ID:	10344
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	58
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Soquel Creek to determine beneficial use support and results are as follows: 7 of 58 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 2 monitoring sites [304SOK-Soquel Creek at Knob Hill, 304SOQ-Soquel Creek Lagoon at RR trussels]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36622**	**Region 3**
Soquel Creek		

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Eight of 39 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 39 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 39 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36622, Enterococcus **Region 3**

Soquel Creek

LOE ID:	14217
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Soquel Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOQ_CCL - Soquel Creek at RR Bridge]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36622, Enterococcus **Region 3**

Soquel Creek

LOE ID:	14216
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Soquel Creek to determine beneficial use support and results are as follows: 8 of 39 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Soquel Creek was collected at 1 monitoring site [304SOQ_CCL - Soquel Creek at RR Bridge].
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Rodeo Creek Gulch**
Water Body ID: **CAR3041301420020124131242**
Water Body Type: **River & Stream**

DECISION ID **40633** **Region 3**
Rodeo Creek Gulch

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the previously approved decision for total ammonia.

One line of evidence is available in the administrative record to assess this pollutant. None of the 83 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 83 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40633, Ammonia **Region 3**
Rodeo Creek Gulch

LOE ID: 17816

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	83
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 0 of 83 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-D - Portola Drv N. of Bridge, RG-X - North Rodea Gulch Rd]
Temporal Representation:	Data was collected over the time period 11/4/2005-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40763**	**Region 3**
Rodeo Creek Gulch		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 82 samples exceed the water quality objectives for Municipal and Domestic Supply or for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 82 samples exceed the water quality objectives for Municipal and Domestic Supply or for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40763, Nitrate **Region 3**

Rodeo Creek Gulch

LOE ID:	17709
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	82
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 0 of 82 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-X - North Rodea Gulch Rd, RG-D - Portola Drv N. of Bridge]
Temporal Representation:	Data was collected over the time period 11/4/2005-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40763, Nitrate **Region 3**

Rodeo Creek Gulch

LOE ID:	17710

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	82
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 0 of 82 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-X - North Rodea Gulch Rd, RG-D - Portola Drv N. of Bridge]
Temporal Representation:	Data was collected over the time period 11/4/2005-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40764**	**Region 3**
Rodeo Creek Gulch		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the 20 samples exceed the water quality objectives for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 20 samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40764, Oxygen, Dissolved **Region 3**

Rodeo Creek Gulch

LOE ID:	17892
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 2 of 20 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 4 monitoring sites [RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-D - Portola Drv N. of Bridge]
Temporal Representation:	Data was collected over the time period 3/12/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

DECISION ID	40775	Region 3
Rodeo Creek Gulch		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 46 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 46 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40775, Temperature, water	**Region 3**
Rodeo Creek Gulch	

LOE ID:	17416
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 1 of 46 samples exceed the criterion for Water Temperature.

Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-X - North Rodea Gulch Rd, RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-D - Portola Drv N. of Bridge]
Temporal Representation:	Data was collected over the time period 1/20/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40789**	**Region 3**
Rodeo Creek Gulch		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of 20 samples exceeded the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40789, Turbidity **Region 3**

Rodeo Creek Gulch

LOE ID:	17544
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 17 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-D - Portola Drv N. of Bridge, RG-X - North Rodea Gulch Rd, RG-C - Brummer St N. of bridge]
Temporal Representation:	Data was collected over the time period 1/27/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40834** **Region 3**

Rodeo Creek Gulch

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown

Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Five lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nineteen of 46 samples exceed the Cold Freshwater Habitat water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40834, pH **Region 3**

Rodeo Creek Gulch

LOE ID:	17615
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 0 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is

	greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-X - North Rodea Gulch Rd, RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-D - Portola Drv N. of Bridge]
Temporal Representation:	Data was collected over the time period 1/20/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40834, pH **Region 3**

Rodeo Creek Gulch

LOE ID:	17633
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 0 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-X - North Rodea Gulch Rd, RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-D - Portola Drv N. of Bridge]
Temporal Representation:	Data was collected over the time period 1/20/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40834, pH **Region 3**

Rodeo Creek Gulch

LOE ID:	17632
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 0 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-X - North Rodea Gulch Rd, RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-D - Portola Drv N. of Bridge]
Temporal Representation:	Data was collected over the time period 1/20/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40834, pH **Region 3**

Rodeo Creek Gulch

LOE ID:	17631
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	46
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 0 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-X - North Rodea Gulch Rd, RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-D - Portola Drv N. of Bridge]
Temporal Representation:	Data was collected over the time period 1/20/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40834, pH **Region 3**

Rodeo Creek Gulch

LOE ID:	17630
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	46
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for Rodeo Creek Gulch to determine beneficial use support and results are as follows: 19 of 46 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Rodeo Creek Gulch was collected at 5 monitoring sites [RG-X - North Rodea Gulch Rd, RG-A - North Rodea Gulch Rd second tunout, RG-B - Capitola Rd, south of bridge, RG-C - Brummer St N. of bridge, RG-D - Portola Drv N. of Bridge]
Temporal Representation:	Data was collected over the time period 1/20/2006-5/11/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or

fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Carbonera Creek**
Water Body ID: **CAR3041205319980825105618**
Water Body Type: **River & Stream**

DECISION ID	41844	Region 3
Carbonera Creek		

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Domestic Pet Waste | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Watershed Pathogen TMDL (including San Lorenzo River, Lompico Creek, Carbonera Creek and the San Lorenzo River Estuary)
TMDL Project Code:	726
Date TMDL Approved by USEPA:	07/20/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

Note the pollutant name has been changed from Pathogens to Indicator Bacteria.

This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. One LOE (#3934) is a placeholder for the original listing. In addition, 2 LOEs summarize E. coli data collected in Carbonera Creek. Two of the 7 samples exceed the Water Contact Recreation water quality objective and none of the 7 samples exceed the Non-Contact Recreation water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 7 samples exceeded Water Contact Recreation Objective and this is an insufficient number of samples to consider delisting; a minimum of 28 samples are required.
4. The San Lorenzo River Watershed Pathogen TMDL has been approved by the USEPA on July 20, 2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41844, Indicator Bacteria — Region 3

Carbonera Creek

LOE ID:	18476
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41844, Indicator Bacteria — Region 3

Carbonera Creek

LOE ID:	3934
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41844, Indicator Bacteria **Region 3**

Carbonera Creek

LOE ID:	18354
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41844, Indicator Bacteria **Region 3**

Carbonera Creek

LOE ID:	18355
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41844, Indicator Bacteria **Region 3**

Carbonera Creek

LOE ID:	18477
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41844, Indicator Bacteria **Region 3**

Carbonera Creek

LOE ID:	19882
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected on a single day 12/12/2000.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to

	protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41844, Indicator Bacteria **Region 3**

Carbonera Creek

LOE ID:	19881
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected on a single day 12/12/2000.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **34328** **Region 3**

Carbonera Creek

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Channel Erosion | Construction/Land Development | Erosion/Siltation | Highway/Road/Bridge Runoff | Logging Road Construction/Maintenance | Nonpoint Source | Silviculture
TMDL Name:	San Lorenzo River Sediment
TMDL Project Code:	243
Date TMDL Approved by USEPA:	02/19/2004

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment-pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. Both of the samples have degraded biological community composition (EPT taxa richness less than 12), however, neither of the samples are associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed. There are an insufficient number of samples to determine beneficial use support. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the have more than 40 percent cover of deposited fine and sand sized sediment on the streambed and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34328, Sedimentation/Siltation **Region 3**

Carbonera Creek

LOE ID:	1846
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 34328, Sedimentation/Siltation **Region 3**

Carbonera Creek

LOE ID: 95249

Pollutant: Sediment
LOE Subgroup: Population/Community Degradation
Matrix: Not Specified
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 2
Number of Exceedances: 0

Data and Information Type: BIOLOGICAL MONITORING
Data Used to Assess Water Quality: Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Carbonera Creek. At zero of the two stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40% cover. However, both samples had less than 12 EPT taxa (EPT richness), the threshold for indicating degraded biological diversity and community composition at these locations.
Data Reference: Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline: Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference: Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed

Spatial Representation: Two monitoring locations: Carbonera Rd (2008 and 2009), Above Hwy 25 (2009).
Temporal Representation: Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions: None
QAPP Information: SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):

DECISION ID **37477** **Region 3**

Carbonera Creek

Pollutant: **Temperature, water**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Carbonera Creek provides habitat for coho salmon and steelhead trout, which are listed as a threatened species under the federal Endangered Species Act. Four lines of evidence are available in the administrative record to assess this pollutant. Three LOEs summarize 114 grab samples and 1 of these samples exceeds the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective. LOE 53965 summarizes 55 days of continuous temperature measurements which are evaluated by calculating maximum weekly maximum temperature (MWMT). The MWMTs exceed the evaluation guideline applied to long term continuous temperature data (MWMT for Central Coast Coho, NOAA, 2012) used to interpret the narrative water quality objective. For reference, the MWMT was exceeded 16 days in a row but the MWMT did not exceeded 18 degrees in Carbonera Creek during the period of measurement. Eighteen degrees is the EPA temperature criterion for non-core salmon and trout. However, for this assessment the 16 degree MWMT is used as it is more appropriate and protective for this waterbody. One of the 114 grab samples and the single MWMT calculated from long term deployment of continuous temperature logger data did exceed the relevant evaluation guideline used to interpret the narrative water quality objective for temperature and aquatic life protection. Therefore, the water temperature in Carbonera creek is within the tolerance range for steelhead trout (that use is supported) however, there is not enough data and information to determine a use rating for water temperature when evaluated using the MWMT threshold. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 114 grab samples and the single MWMT calculated from long term deployment of continuous temperature logger data did exceed the relevant evaluation guidelines but, this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37477, Temperature, water **Region 3**

Carbonera Creek

LOE ID:	18775
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37477, Temperature, water **Region 3**

Carbonera Creek

LOE ID:	18785
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan,

	Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37477, Temperature, water **Region 3**

Carbonera Creek

LOE ID:	19879
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	79
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 1 of 79 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to

protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37477, Temperature, water **Region 3**

Carbonera Creek

LOE ID:	53965
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water temperature data submitted by the Lompico Watershed Conservancy from the summer months of 2005 showed that the maximum weekly maximum temperature (MWMT) exceeded 16 degrees Celsius because of co-existance with Coho historically in this watershed . The MWMT is an average for the year and therefore, for the purpose of this assessment is counted as a single sample and exceedance. These data were compiled by Donald Alley (fisheries biologist). For reference, the MWMT was exceeded 16 days in a row but the MWMT did not exceeded 18 degrees in Carbonera Creek during the period of measurement. Eighteen degrees is the EPA temperature criterion for non-core salmon and trout. However, for this assessment the 16 degree MWMT is used as it is more appropriate and protective for this waterbody.
Data Reference:	Data for temperature in San Lorenzo Creek (Monterey County) and other water bodies, May 2005-Aug. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Per the Central Coast Coho Salmon Recovery Plan, Vol III, pages 55-56 (NOAA, 2012) population level temperature rating of 16 degrees C (temperature expressed as maximum weekly maximum temperature or MWMT) are protective of juvenile coho during rearing season (summer). This threshold is protective of chronic exposure to elevated water temperatures which can result decline and absence of juvenile coho in habitats. This is also consistent with the 'U.S. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards' (USEPA 2003), in which the U.S. EPA recommends a criterion for the protection of moderate to high density summertime salmon and trout juvenile rearing (i.e., core juvenile rearing) of a maximum weekly maximum temperature (MWMT) of 16 degrees C. The MWMT is also known as the maximum 7-day average of daily maximums (7DADM). The 16 degrees C MWMT criterion is recommended to (1) safely protect juvenile salmon and trout from lethal temperatures; (2) provide upper optimal conditions for juvenile growth under limited food during the period of summer maximum temperatures and optimal temperatures for other times of the growth season; (3) avoid temperatures where juvenile salmon and trout are at a competitive disadvantage with other fish; (4) protect against temperature induced elevated disease rates; and (5) provide temperatures that studies show juvenile salmon and trout prefer and are found in high densities. Both the CDFG and NOAA strongly support the use of the USEPA temperature guidance for the purposes of water quality assessment in California. These criteria have

	been adopted by both Oregon and Washington state and used for 303(d) Listing and TMDL development by the North Coast Region Water Quality Control Board. Its use in other geographic settings is appropriate as it has been recognized that salmonid stocks do not tend to vary much in their life history thermal needs, regardless of their geographic location. There is not enough significant genetic variation among stocks or among species of salmonids to warrant geographically specific water temperature standards.
Guideline Reference:	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. U.S. Environmental Protection Agency Region 10 Office of Water, Seattle, WA. NOAA - Final Recovery Plan for Central California Coast coho salmon (Oncorhynchus kisutch) Evolutionarily Significant Unit.
Spatial Representation:	Data collected at site 20a: Behind Health Services complex.
Temporal Representation:	Data collected daily from 8/20/2005-10/14/2005.
Environmental Conditions:	
QAPP Information:	There was no QAPP submitted with this data, but detailed letters outlining QA/QC procedures were provided by the city of Santa Cruz and Donald Alley.
QAPP Information Reference(s):	

DECISION ID	**32862**	**Region 3**
Carbonera Creek		

Pollutant:	**Nutrients**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Agriculture | Collection System Failure | Grazing-Related Sources | Groundwater Loadings | Natural Sources | Onsite Wastewater Systems (Septic Tanks) | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Nitrate
TMDL Project Code:	519
Date TMDL Approved by USEPA:	01/14/2003
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. A TMDL was approved by USEPA on January 14, 2003. The RWQCB is tracking the implementation of the TMDL through the Nitrate Management Plan being implemented by Santa Cruz County. Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE (LOE #1845) is a placeholder that does not contain data or information. Staff is unable to reconstruct the original data used to place this water segment-pollutant combination on the section 303(d) list. Zero of the 86 samples exceed the Municipal and Domestic Supply water quality objective and zero of the 86 samples exceed the Agricultural Supply water quality objective. However, as summarized in LOE 26449, Fifty-four of 72 samples exceed the numeric target established by the TMDL (Resolution #00-003, adopting the TMDL for nitrate in the San Lorenzo River Watershed) established to protect the Municipal and Domestic Supply. The numeric target meets the criteria of the Listing Policy (Section 6.1.3) as it is applicable to the beneficial use, protective of the beneficial use, linked to the pollutant under consideration, scientifically based and peer reviewed, well described and identified a range above which negative impacts will occur. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section

303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty-four of 72 samples exceed the Evaluation Guideline (the numeric target from the TMDL, 2000) and this exceeds the allowable frequency in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32862, Nutrients **Region 3**

Carbonera Creek

LOE ID:	18288
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32862, Nutrients **Region 3**

Carbonera Creek

LOE ID:	18148
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32862, Nutrients **Region 3**

Carbonera Creek

LOE ID:	26449
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	72
Number of Exceedances:	54
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data collected by Santa Cruz County Environmental Health staff from the San Lorenzo River near Felton (San Lorenzo River at Big Trees (304SLT_SCC) are assessed relative to

	the numeric target for Nitrate, established by Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed. Fifty-four of 72 samples exceed the numeric target.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin has the following narrative General Objective: Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed (specifically including Carbonera Creek) established the following numeric target for Nitrate: 1.5 mg/L Nitrate as NO3 (or 0.33 mg/L Nitrate as N).
Guideline Reference:	San Lorenzo River Nitrate TMDL
Spatial Representation:	Data were collected by Santa Cruz County Environmental Health staff from Two sites, Carbonera Creek at the confluence with Branciforte Creek (304CAR) and Carbonera Creek at Glenn Canyon Road (304CAG).
Temporal Representation:	Santa Cruz County Environmental Health staff conducted monitoring in Carbonera Creek between January 1997 and October 2006.
Environmental Conditions:	
QAPP Information:	Santa Cruz County Environmental Health monitoring program QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32862, Nutrients **Region 3**

Carbonera Creek

LOE ID:	18273
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation: Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32862, Nutrients **Region 3**

Carbonera Creek

LOE ID: 1845

Pollutant: Nutrients
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: Placeholder reference 2006 303(d)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32862, Nutrients **Region 3**

Carbonera Creek

LOE ID: 18661

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 80
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 80 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-6/15/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32862, Nutrients **Region 3**

Carbonera Creek

LOE ID:	18149
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride

	concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32862, Nutrients **Region 3**

Carbonera Creek

LOE ID:	18660
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	80
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 80 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-6/15/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the

dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	37534	Region 3
Carbonera Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use. and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37534, Ammonia	**Region 3**
Carbonera Creek	

LOE ID:	17567
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia as N, Total.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37338 Region 3

Carbonera Creek

Pollutant:	**Electrical Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 114 samples exceeds the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 114 samples exceeds the water quality objective for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37338, Electrical Conductivity Region 3

Carbonera Creek

LOE ID:	18569
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	79
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 79 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37338, Electrical Conductivity **Region 3**

Carbonera Creek

LOE ID:	17498
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37338, Electrical Conductivity **Region 3**

Carbonera Creek

LOE ID:	17445
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37338, Electrical Conductivity **Region 3**

Carbonera Creek

LOE ID:	17569
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37324 **Region 3**

Carbonera Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Six of the 106 samples exceed the water quality objective for Dissolved Oxygen in Cold Freshwater Habitat. . The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 106 samples exceed the water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37324, Oxygen, Dissolved — Region 3

Carbonera Creek

LOE ID:	19813
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	71
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 1 of 71 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996

	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37324, Oxygen, Dissolved **Region 3**

Carbonera Creek

LOE ID:	18077
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 5 of 32 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37324, Oxygen, Dissolved **Region 3**

Carbonera Creek

LOE ID:	19874
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/14/1997.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37324, Oxygen, Dissolved **Region 3**

Carbonera Creek

LOE ID:	18216
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37501**	**Region 3**
Carbonera Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 20 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 20 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37501, Turbidity **Region 3**

Carbonera Creek

LOE ID:	19663
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **37544** **Region 3**

Carbonera Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. Two of 114 samples exceed the water quality objectives for Agricultural Supply, Municipal & Domestic Supply, Non-Contact Recreation or Water Contact Recreation. Five of 114 samples exceed the water quality objective for Cold Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 114 samples exceed the water quality objectives for Agricultural Supply, Municipal & Domestic Supply, Non-Contact Recreation or Water Contact Recreation. Five of 114 samples exceed the water quality objective for Cold Freshwater Habitat.and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18026
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and

	Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18027
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18028
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18861
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	19701
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	78
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 2 of 78 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	19697
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	78
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 2 of 78 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	19698
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	78
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 4 of 78 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	19699
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	78
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 2 of 78 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	19700
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	78
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Carbonera Creek to determine beneficial use support and results are as follows: 2 of 78 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 2 monitoring sites [304CAG_SCC - CARBONERA CR at GLEN CANYON RD., 304CAR_SCC - CARBONERA CR at BRANCIFORTE CR]
Temporal Representation:	Data was collected over the time period 9/20/1995-8/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the

	dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18945
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18929
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18009
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18878
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18010
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Carbonera Creek to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 8/9/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37544, pH **Region 3**

Carbonera Creek

LOE ID:	18877
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Carbonera Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Carbonera Creek was collected at 1 monitoring site [304-CARBO-21 - Carbonera Creek (trib to Branciforte Creek, Trib to San Lorenzo)]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Granite Creek**
Water Body ID: **CAR3041205119990304103631**
Water Body Type: **River & Stream**

DECISION ID **40824** **Region 3**
Granite Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40824, Ammonia **Region 3**
Granite Creek

LOE ID:	17603
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 5/25/2004-7/6/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	40668	Region 3
Granite Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Neither of the 2 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. Neither of the 2 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40668, Escherichia coli (E. coli) **Region 3**

Granite Creek

LOE ID:	18523
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 5/25/2004-7/6/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40668, Escherichia coli (E. coli) **Region 3**

Granite Creek

LOE ID:	18538

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 5/25/2004-7/6/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**40667**	**Region 3**
Granite Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the water quality objective for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Neither of the 2 samples exceed the water quality objective for Municipal and Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40667, Nitrate **Region 3**

Granite Creek

LOE ID:	17991
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 5/25/2004-7/6/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	40666	Region 3
Granite Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 22 samples exceed the Cold Freshwater Habitat water quality objective for dissolved oxygen. determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 22 samples exceed the Cold Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40666, Oxygen, Dissolved	**Region 3**
Granite Creek	

LOE ID:	18133
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and

	results are as follows: 2 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 8/3/2003-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40666, Oxygen, Dissolved **Region 3**

Granite Creek

LOE ID:	17985
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **40696** **Region 3**

Granite Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 22 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 22 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40696, Temperature, water **Region 3**

Granite Creek

LOE ID:	18565
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40696, Temperature, water **Region 3**

Granite Creek

LOE ID:	18835
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 8/3/2003-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40467 **Region 3**

Granite Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. None of the 22 samples exceed water quality objectives for Cold Freshwater Habitat, Municipal and Domestic Supply, Water Contact Recreation or Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 22 samples exceed water quality objectives for Cold Freshwater Habitat, Municipal and Domestic Supply, Water Contact Recreation or Non-Contact Recreation, and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40467, pH **Region 3**

Granite Creek

LOE ID:	18401
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 8/3/2003-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40467, pH **Region 3**

Granite Creek

LOE ID:	18626
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40467, pH **Region 3**

Granite Creek

LOE ID:	18610
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40467, pH **Region 3**

Granite Creek

LOE ID:	18611

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40467, pH **Region 3**

Granite Creek

LOE ID:	18400
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 8/3/2003-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40467, pH **Region 3**

Granite Creek

LOE ID:	19026
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 8/3/2003-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40467, pH **Region 3**

Granite Creek

LOE ID:	18625
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40467, pH **Region 3**

Granite Creek

LOE ID:	19027
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Granite Creek to determine beneficial use support and results are as follows: 0 of 21 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Granite Creek was collected at 1 monitoring site [304-GRANI-21 - Granite Creek]
Temporal Representation:	Data was collected over the time period 8/3/2003-10/30/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Branciforte Creek**
Water Body ID: **CAR3041205119990223104548**
Water Body Type: **River & Stream**

DECISION ID **34326** **Region 3**
Branciforte Creek

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status Revised
Sources: Channel Erosion | Erosion/Siltation | Highway/Road/Bridge Construction | Hydromodification
TMDL Name: San Lorenzo River Sediment
TMDL Project Code: 243
Date TMDL Approved by USEPA: 02/19/2004
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment/pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. All three of the samples have have some evidence of degraded biological community composition but do not have less than 12 EPT taxa richness. However, all three stations have more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All three samples have more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34326, Sedimentation/Siltation **Region 3**

Branciforte Creek

LOE ID:	95248
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Branciforte Creek. At three of the three stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. However, all three samples had slightly more than 12 EPT taxa (EPT richness), the threshold for indicating degraded biological diversity and community composition at these locations.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	Three monitoring locations: DeLaveaga (2008), ShadyBrook bdg (2008), DeLaveaga (2009)
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34326, Sedimentation/Siltation **Region 3**

Branciforte Creek

LOE ID:	3933
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

	2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	37207	Region 3
Branciforte Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Branciforte Creek provides habitat for coho salmon and steelhead trout, which are listed as a threatened species under the federal Endangered Species Act. Six lines of evidence are available in the administrative record to assess this pollutant. Five LOEs summarize 288 grab samples and 1 overnight diurnal monitoring event. The overnight diurnal sample did not exceed the evaluation guideline (optimum range for steelhead, Moyle, 1976) but 3 of the 288 grab samples did exceed the evaluation guideline used to interpret the narrative water quality objective. LOE 53677 summarizes 40 days of continuous temperature measurements which are evaluated by calculating maximum weekly maximum temperature (MWMT). The MWMTs exceed the evaluation guideline applied to long term continuous temperature data (MWMT for Central Coast Coho, NOAA, 2012) used to interpret the narrative water quality objective. Three of the 288 grab samples exceed the optimal range for steelhead guideline. However, the MWMT calculated from long term deployment of continuous temperature logger data did exceed the relevant evaluation guideline used to interpret the narrative water quality objective and this is counted as a single sample and a single exceedance. For reference, the MWMT was exceeded ten days in a row but the MWMT did not exceeded 18 degrees in Branciforte Creek during the period of measurement. Eighteen degrees is the EPA temperature criterion for non-core salmon and trout. However, for this assessment the 16 degree MWMT is used as it is more appropriate and protective for this waterbody. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.interpret the narrative water quality objective for temperature and aquatic life protection but this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37207, Temperature, water **Region 3**

Branciforte Creek

LOE ID:	18727
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr.]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37207, Temperature, water **Region 3**

Branciforte Creek

LOE ID:	19877
Pollutant:	Temperature, water

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	138
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 138 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 8/19/1991-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37207, Temperature, water **Region 3**

Branciforte Creek

LOE ID:	11930
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37207, Temperature, water **Region 3**

Branciforte Creek

LOE ID:	11934
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for

	growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37207, Temperature, water **Region 3**

Branciforte Creek

LOE ID:	18764
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	123
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 3 of 123 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-22 - Branciforte at DeLaveaga park]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37207, Temperature, water **Region 3**

Branciforte Creek

LOE ID:	53677
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water temperature data submitted by the Lompico Watershed Conservancy from the summer months of 2005 showed that the maximum weekly maximum temperature (MWMT) exceeded 16 degrees Celsius because of co-existance with Coho historically in this watershed . The MWMT is an average for the year and therefore, for the purpose of this assessment is counted as a single sample and exceedance.These data were compiled by Donald Alley (fisheries biologist).
Data Reference:	Data for temperature in San Lorenzo Creek (Monterey County) and other water bodies, May 2005-Aug. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Per the Central Coast Coho Salmon Recovery Plan, Vol III, pages 55-56 (NOAA, 2012) population level temperature rating of 16 degrees C (temperature expressed as maximum weekly maximum temperature or MWMT) are protective of juvenile coho during rearing season (summer). This threshold is protective of chronic exposure to elevated water temperatures which can result decline and absence of juvenile coho in habitats. This is also consistent with the 'U.S. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards' (USEPA 2003), in which the U.S. EPA recommends a criterion for the protection of moderate to high density summertime salmon and trout juvenile rearing (i.e., core juvenile rearing) of a maximum weekly maximum temperature (MWMT) of 16 degrees C. The MWMT is also known as the maximum 7-day average of daily maximums (7DADM). The 16 degrees C MWMT criterion is recommended to (1) safely protect juvenile salmon and trout from lethal temperatures; (2) provide upper optimal conditions for juvenile growth under limited food during the period of summer maximum temperatures and optimal temperatures for other times of the growth season; (3) avoid temperatures where juvenile salmon and trout are at a competitive disadvantage with other fish; (4) protect against temperature induced elevated disease rates; and (5) provide temperatures that studies show juvenile salmon and trout prefer and are found in high densities. Both the CDFG and NOAA strongly support the use of the USEPA temperature guidance for the purposes of water quality assessment in California. These criteria have been adopted by both Oregon and Washington state and used for 303(d) Listing and TMDL development by the North Coast Region Water Quality Control Board. Its use in other geographic settings is appropriate as it has been recognized that salmonid stocks do not tend to vary much in their life history thermal needs, regardless of their geographic location. There is not enough significant genetic variation among stocks or among species of salmonids to warrant geographically specific water temperature standards.
Guideline Reference:	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. U.S. Environmental Protection Agency Region 10 Office of Water, Seattle, WA. NOAA - Final Recovery Plan for Central California Coast coho salmon (Oncorhynchus kisutch) Evolutionarily Significant Unit.

Spatial Representation:	Data collected at site 21a: Below Granite Creek confluence.
Temporal Representation:	Data collected daily from 8/20/2005-9/30/2005.
Environmental Conditions:	
QAPP Information:	There was no QAPP submitted with this data, but detailed letters outlining QA/QC procedures were provided by the city of Santa Cruz and Donald Alley.
QAPP Information Reference(s):	

DECISION ID	43008	Region 3
Branciforte Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	San Lorenzo/Zayante Chlorpyrifos TMDL
TMDL Project Code:	1060
Date TMDL Approved by USEPA:	11/25/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under 3.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of two samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Both of the samples exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The San Lorenzo/Zayante Chlorpyrifos TMDL has been approved by the USEPA on 11/25/2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of

the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 43008, Chlorpyrifos **Region 3**

Branciforte Creek

LOE ID:	16127
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37483** **Region 3**

Branciforte Creek

Pollutant: **Enterococcus**

Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Watershed Pathogen TMDL (including San Lorenzo River, Lompico Creek, Carbonera Creek and the San Lorenzo River Estuary)
TMDL Project Code:	726
Date TMDL Approved by USEPA:	07/20/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Eleven out of 39 single sample maximumn exceeded the evaluation guideline used to intrepret the Water Contact Recreation objective. However, zero of the 39 samples exceeded the Non-Contact Recreation objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven out of 39 single sample maximumn exceeded the evaluation guideline used to intrepret the Water Contact Recreation objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37483, Enterococcus **Region 3**

Branciforte Creek

LOE ID:	14153
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental

Data Reference:	Assessment Program (R3_CCLEAN) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci. Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRF_CCL - Branciforte Creek at Isbel]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37483, Enterococcus **Region 3**

Branciforte Creek

LOE ID:	14152
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Branciforte Creek to determine beneficial use support and results are as follows: 11 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRF_CCL - Branciforte Creek at Isbel].
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID	37525	Region 3
Branciforte Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Watershed Pathogen TMDL (including San Lorenzo River, Lompico Creek, Carbonera Creek and the San Lorenzo River Estuary)
TMDL Project Code:	726
Date TMDL Approved by USEPA:	07/20/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 and 3.3 of the Listing Policy. Ten lines of evidence are available in the administrative record to assess this pollutant. Thirty-eight of the 79 samples exceeded the water quality objective for Water Contact Recreation but only 1 of 79 samples exceeded the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-eight of the 79 samples exceeded the water quality objective for Water Contact Recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The San Lorenzo River Watershed Pathogen TMDL has been approved by the USEPA on July 20, 2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli)	**Region 3**
Branciforte Creek	

LOE ID:	19904
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected on a single day 2/20/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli) **Region 3**

Branciforte Creek

LOE ID:	19919
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a

	minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected on a single day 2/20/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli) **Region 3**

Branciforte Creek

LOE ID:	18556
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 3 monitoring sites [304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-23 Branciforte Creek @ 434 Market Street]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli) **Region 3**

Branciforte Creek

LOE ID:	18551
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	18
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 1 of 18 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-23 Branciforte Creek @ 434 Market Street]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli) **Region 3**

Branciforte Creek

LOE ID:	18279
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 3 monitoring sites [304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-23 Branciforte Creek @ 434 Market Street]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli) Region 3

Branciforte Creek

LOE ID:	18550
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	18
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 14 of 18 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-23 Branciforte Creek @ 434 Market Street]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli) **Region 3**

Branciforte Creek

LOE ID:	10492
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli) **Region 3**

Branciforte Creek

LOE ID:	10530
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli) **Region 3**

Branciforte Creek

LOE ID:	14029
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a

	minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRF_CCL - Branciforte Creek at Isbel]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37525, Escherichia coli (E. coli) **Region 3**

Branciforte Creek

LOE ID:	14028
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Branciforte Creek to determine beneficial use support and results are as follows: 16 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRF_CCL - Branciforte Creek at Isbel]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID **37516** **Region 3**

Branciforte Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final	List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Revised
Sources:	Collection System Failure | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Watershed Pathogen TMDL (including San Lorenzo River, Lompico Creek, Carbonera Creek and the San Lorenzo River Estuary)
TMDL Project Code:	726
Date TMDL Approved by USEPA:	07/20/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Ten lines of evidence are available in the administrative record to assess this pollutant. Five of the 16 samples exceeded the water quality objective for Water Contact Recreation but zero of the 16 samples exceeded the water quality objective for Non-Contact Recreation. For Non-Contact Recreation, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 16 samples exceeded the water quality objective for Water Contact Recreation and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. The San Lorenzo River Watershed Pathogen TMDL has been approved by the USEPA on July 20, 2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37516, Fecal Coliform **Region 3**

Branciforte Creek

LOE ID:	18842
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected on a single day 8/19/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37516, Fecal Coliform **Region 3**

Branciforte Creek

LOE ID:	10662
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200

	MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37516, Fecal Coliform **Region 3**

Branciforte Creek

LOE ID:	10663
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37516, Fecal Coliform **Region 3**

Branciforte Creek

LOE ID:	18843
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected on a single day 8/19/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **37542** **Region 3**

Branciforte Creek

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data were assessed. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 10748) and total ammonia (Decision 10750). This decision contains all of the LOEs from those decisions in addition to new LOEs. Four lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE summarizes unionized ammonia data in which zero of the 14 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. Three LOEs summarize total ammonia data and zero of the 53 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37542, Ammonia **Region 3**

Branciforte Creek

LOE ID:	13950
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause

	any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRF_CCL - Branciforte Creek at Isbel]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37542, Ammonia **Region 3**

Branciforte Creek

LOE ID:	9165
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37542, Ammonia **Region 3**

Branciforte Creek

LOE ID:	9164

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37542, Ammonia **Region 3**

Branciforte Creek

LOE ID:	17566
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-24 - Happy Valley School, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr.]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**36755**	**Region 3**
Branciforte Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36755, Boron — Region 3

Branciforte Creek

LOE ID:	9166
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37505 — Region 3

Branciforte Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed.

Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objective for Agricultural Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 15 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37505, Chloride **Region 3**

Branciforte Creek

LOE ID:	9167
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 43007 Region 3

Branciforte Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43007, Chlorophyll-a Region 3

Branciforte Creek

LOE ID:	9216
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42819**	**Region 3**
Branciforte Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed.

Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of two samples did not exceed the Evaluation Guideline (Siepmann and Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Neither of 2 samples exceeded the Evaluation Guideline (Siepmann and Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42819, Diazinon **Region 3**

Branciforte Creek

LOE ID:	16787
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36727** **Region 3**

Branciforte Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. None of the 213 samples exceed the water quality objectives for either Municipal and Domestic Supply or for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 213 samples exceed the water quality objectives for either Municipal and Domestic Supply or for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID:	9218

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID:	18363
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and

	results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 3 monitoring sites [304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-23 Branciforte Creek @ 434 Market Street]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID:	18395
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-23 Branciforte Creek @ 434 Market Street]

Temporal Representation: Data was collected over the time period 5/25/2004-11/8/2004.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID: 18622

Pollutant: Nitrate

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 135

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 135 samples exceed the criterion for Nitrate as N.

Data Reference: Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996
Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference: Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A
Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]

Temporal Representation: Data was collected over the time period 7/12/1994-7/13/2006.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID:	18378
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 3 monitoring sites [304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-23 Branciforte Creek @ 434 Market Street]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID:	18621
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	135
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 135 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 7/12/1994-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID:	18410
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-23 Branciforte Creek @ 434 Market Street]
Temporal Representation:	Data was collected over the time period 5/25/2004-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID:	13918
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRF_CCL - Branciforte Creek at Isbel]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID:	13934
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRF_CCL - Branciforte Creek at Isbel]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36727, Nitrate **Region 3**

Branciforte Creek

LOE ID:	9217
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36777	Region 3
Branciforte Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 279 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at fully supporting. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of the 279 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36777, Oxygen, Dissolved **Region 3**

Branciforte Creek

LOE ID:	11933
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Branciforte Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36777, Oxygen, Dissolved **Region 3**

Branciforte Creek

LOE ID:	11932
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36777, Oxygen, Dissolved **Region 3**

Branciforte Creek

LOE ID:	18102
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr.]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36777, Oxygen, Dissolved **Region 3**

Branciforte Creek

LOE ID:	18013
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	122
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 14 of 122 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-22 - Branciforte at DeLaveaga park]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams

Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36777, Oxygen, Dissolved **Region 3**

Branciforte Creek

LOE ID:	11912
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36777, Oxygen, Dissolved **Region 3**

Branciforte Creek

LOE ID:	11913
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 5 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36777, Oxygen, Dissolved **Region 3**

Branciforte Creek

LOE ID:	19795
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	130
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 1 of 130 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 7/12/1994-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36777, Oxygen, Dissolved **Region 3**

Branciforte Creek

LOE ID:	19872
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 3 of 38 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 7/12/1994-5/27/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	40227	Region 3
Branciforte Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objectives for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the water quality objectives for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40227, Sodium	**Region 3**
Branciforte Creek	

LOE ID:	9219
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37438**	**Region 3**
Branciforte Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Six of the 283 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 283 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37438, Specific Conductivity **Region 3**

Branciforte Creek

LOE ID:	10664
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37438, Specific Conductivity **Region 3**

Branciforte Creek

LOE ID:	10544
Pollutant:	Electrical Conductivity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37438, Specific Conductivity **Region 3**

Branciforte Creek

LOE ID:	17532
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	119
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 119 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-22 - Branciforte at DeLaveaga park]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37438, Specific Conductivity **Region 3**

Branciforte Creek

LOE ID:	17387
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 4 monitoring sites [304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr.]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37438, Specific Conductivity **Region 3**

Branciforte Creek

LOE ID:	17514
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 2 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-23 Branciforte Creek @ 434 Market Street]
Temporal Representation:	Data was collected on a single day 9/17/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37438, Specific Conductivity **Region 3**

Branciforte Creek

LOE ID:	17495

Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304-BRANC-23 Branciforte Creek @ 434 Market Street]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37438, Specific Conductivity **Region 3**

Branciforte Creek

LOE ID:	18567
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	136
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 136 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-

	1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 7/12/1994-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**42936**	**Region 3**
Branciforte Creek		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant in water samples. None of the samples were toxic to test organisms (exhibited a significant increase in mortality or decrease in cell density compared to the laboratory control) and therefore do not exceed the narrative General Objective for toxicity, set to protect for aquatic life beneficial uses. The following is a summary of the results from individual toxicity tests. None of the 2 samples (tested for toxicity to plants) exhibited significant reduction in cell density relative to the control. In addition, none of the 2 samples (tested for toxicity to vertebrate test organisms) exhibited a significant increase in mortality compared to the laboratory control. Lastly, none of the 2 samples, tested for toxicity to invertebrate test organisms exhibited a significant increase in mortality compared to the laboratory control. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples were toxic to test organisms. Therefore, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42936, Toxicity **Region 3**

Branciforte Creek

LOE ID:	23731
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42936, Toxicity **Region 3**

Branciforte Creek

LOE ID:	23733
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42936, Toxicity **Region 3**

Branciforte Creek

LOE ID:	23734
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42855**	**Region 3**
Branciforte Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Eight of the 109 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life

beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of the 109 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42855, Turbidity **Region 3**

Branciforte Creek

LOE ID:	11931
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 2/16/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42855, Turbidity **Region 3**

Branciforte Creek

LOE ID:	19647
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	100
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 6 of 100 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 8/19/1991-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **36735** **Region 3**

Branciforte Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Ten samples exceed the Agricultural Supply water quality objective, eight samples exceed the Cold Freshwater Habitat water quality objectives and 12 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten samples exceed the Agricultural Supply water quality objective, eight samples exceed the Cold Freshwater Habitat water quality objectives and 12 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	19660
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	140
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 8 of 140 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 8/19/1991-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	19661
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	140
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 8 of 140 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 8/19/1991-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	19662

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	140
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 8 of 140 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 8/19/1991-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	19180
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr.]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10493
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [

	304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10494
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10495

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10496
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10545
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer

	months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10546
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10547
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10543
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5

	nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10278
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	10279
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRA-Branciforte Road at Water Street]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	19659
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	140
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use

	support and results are as follows: 7 of 140 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation:	Data was collected over the time period 8/19/1991-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	19658
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	140
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Branciforte Creek to determine beneficial use support and results are as follows: 6 of 140 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Branciforte Creek was collected at 1 monitoring site [304BRI_SCC - BRANCIFORTE CR. at ISBEL DR.]
Temporal Representation: Data was collected over the time period 8/19/1991-7/13/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID: 19182

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 11
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr.]
Temporal Representation: Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID: 19181

Pollutant: pH
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr.]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	18086
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	126
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 126 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-22 - Branciforte at DeLaveaga park]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	18085
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	126
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 126 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-22 - Branciforte at DeLaveaga park]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	18084
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	126
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 126 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-22 - Branciforte at DeLaveaga park]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	18083
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	126
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 1 of 126 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-22 - Branciforte at DeLaveaga park]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	18853
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr.]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	18067
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	126
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Clean streams project) (R3_CLNStrm) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 126 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-24 - Happy Valley School, 304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr., 304-BRANC-22 - Branciforte at DeLaveaga park]
Temporal Representation:	Data was collected over the time period 7/26/2003-11/8/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Data entry completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Clean Streams Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36735, pH **Region 3**

Branciforte Creek

LOE ID:	18852
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Branciforte Creek to determine beneficial use support and results are as follows: 2 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Branciforte Creek was collected at 5 monitoring sites [304-BRANC-23 Branciforte Creek @ 434 Market Street, 304-BRANC-22 - Branciforte at DeLaveaga park, 304-BRANC-24 - Happy Valley School, 304-BRANC-21 - Branciforte above confluence w/SLR, 304-BRANC-25 Branciforte Creek @ 4055 Branciforte Dr.]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Arana Gulch**
Water Body ID: **CAR3041205119990222133711**
Water Body Type: **River & Stream**

DECISION ID	36945	Region 3
Arana Gulch		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	San Lorenzo/Zayante Chlorpyrifos TMDL
TMDL Project Code:	1060
Date TMDL Approved by USEPA:	11/25/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under 3.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Two of the 2 samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the 2 samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The San Lorenzo River Watershed Chlorpyrifos TMDL has been approved by the USEPA on November 25, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 36945, Chlorpyrifos **Region 3**

Arana Gulch

LOE ID:	16348
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Arana Gulch to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch at La Fonda Ave]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **46244** **Region 3**

Arana Gulch

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE summarizes unionized ammonia data in which zero of the 14 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. One LOE summarizes total ammonia data and zero of the 15 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46244, Ammonia **Region 3**

Arana Gulch

LOE ID:	9148
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 15 samples exceed the

	criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46244, Ammonia **Region 3**

Arana Gulch

LOE ID:	9149
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41503 Region 3

Arana Gulch

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 16 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 16 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41503, Chlorophyll-a Region 3

Arana Gulch

LOE ID:	9150
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36730**	**Region 3**
Arana Gulch		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data are assessed.

Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of two samples exceeded the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36730, Diazinon **Region 3**

Arana Gulch

LOE ID:	16771
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch at La Fonda Ave]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36961**	**Region 3**
Arana Gulch		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 22 samples exceeded the Municipal and Domestic Supply objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36961, Nitrate	**Region 3**
Arana Gulch	

LOE ID:	9151

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36961, Nitrate **Region 3**

Arana Gulch

LOE ID:	18381
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arana Gulch to determine beneficial use support and results

	are as follows: 0 of 7 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 3 monitoring sites [304-ARANA-22 - Arana Creek at Paul Sweet Rd and Maybe Lane, 304-ARANA-23 - Arana Creek At Mid-fork, 304-ARANA-21 - Arana Creek At Harbor High fish ladder]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	36946	Region 3
Arana Gulch		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Two of the 25 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat. Five of 15 samples exceed the general water quality objective for oxygen saturation (applied as a single sample maximum). However, the Basin Plan objective states that the median shall not fall below 85% saturation and the median value did not exceed this criteria and that the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of 25 samples exceeded the Cold Freshwater Habitat objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36946, Oxygen, Dissolved **Region 3**

Arana Gulch

LOE ID:	12117
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 5 of 14 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36946, Oxygen, Dissolved **Region 3**

Arana Gulch

LOE ID:	12116

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36946, Oxygen, Dissolved **Region 3**

Arana Gulch

LOE ID:	12133
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36946, Oxygen, Dissolved **Region 3**

Arana Gulch

LOE ID:	12134
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer

	months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36946, Oxygen, Dissolved **Region 3**

Arana Gulch

LOE ID:	18041
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arana Gulch to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 3 monitoring sites [304-ARANA-21 - Arana Creek At Harbor High fish ladder, 304-ARANA-22 - Arana Creek at Paul Sweet Rd and Maybe Lane, 304-ARANA-23 - Arana Creek At Mid-fork]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **46292** **Region 3**

Arana Gulch

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 25 samples exceeded the evaluation guideline (Moyle 1976) as it is applied to the Cold Freshwater Habitat objective The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46292, Temperature, water **Region 3**

Arana Gulch

LOE ID:	12132
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46292, Temperature, water **Region 3**

Arana Gulch

LOE ID:	18673
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arana Gulch to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 3 monitoring sites [304-ARANA-21 - Arana Creek At Harbor High fish ladder, 304-ARANA-22 - Arana Creek at Paul Sweet Rd and Maybe Lane, 304-ARANA-23 - Arana Creek At Mid-fork]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46292, Temperature, water **Region 3**

Arana Gulch

LOE ID:	12135
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42388** **Region 3**

Arana Gulch

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name has changed from Unknown toxicity to Toxicity. This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing

status.

Three lines of evidence are available in the administrative record to assess this pollutant in water samples. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Two samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). One of the two samples were toxic to test organisms (exhibited a significant increase in mortality or decrease in cell density compared to the laboratory control) and therefore exceeded the narrative General Objective for toxicity, set to protect for aquatic life beneficial uses.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 2 samples (tested for toxicity to plants) exhibited significant reduction in cell density relative to the control but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42388, Toxicity **Region 3**

Arana Gulch

LOE ID:	23540
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch at La Fonda Ave]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42388, Toxicity **Region 3**

Arana Gulch

LOE ID:	23541
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Arana Gulch to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch at La Fonda Ave].
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42388, Toxicity **Region 3**

Arana Gulch

LOE ID:	23535
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch at La Fonda Ave]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring

	includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36947 Region 3

Arana Gulch

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 8 samples exceeded the evaluation guideline for turbidity (Sigler et al. (1984) as it is applied to the Cold Freshwater Habitat objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36947, Turbidity Region 3

Arana Gulch

LOE ID:	12131
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8

Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	37071	Region 3
Arana Gulch		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. One of the samples exceed the water quality objective for Cold Freshwater Habitat. None of the samples exceed water quality objectives for Municipal and Domestic Supply, Non-contact Recreation or Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One out of 25 samples exceeded the water quality objective for Cold Freshwater Habitat and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. None of the samples exceed water quality objectives for Municipal and Domestic Supply, Non-contact Recreation or Water Contact recreation. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	10657
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	10658
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	10660
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	10661
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]

Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	10674
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	10675
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	10676
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5

	nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected on a single day 8/25/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	10659
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	19016
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arana Gulch to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 3 monitoring sites [304-ARANA-21 - Arana Creek At Harbor High fish ladder, 304-ARANA-22 - Arana Creek at Paul Sweet Rd and Maybe Lane, 304-ARANA-23 - Arana Creek At Mid-fork]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	19019
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 3 monitoring sites [304-ARANA-21 - Arana Creek At Harbor High fish ladder, 304-ARANA-22 - Arana Creek at Paul Sweet Rd and Maybe Lane, 304-ARANA-23 - Arana Creek At Mid-fork]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	19018
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 3 monitoring sites [304-ARANA-21 - Arana Creek At Harbor High fish ladder, 304-ARANA-22 - Arana Creek at Paul Sweet Rd and Maybe Lane, 304-ARANA-23 - Arana Creek At Mid-fork]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37071, pH **Region 3**

Arana Gulch

LOE ID:	19017
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 3 monitoring sites [304-ARANA-21 - Arana Creek At Harbor High fish ladder, 304-ARANA-22 - Arana Creek at Paul Sweet Rd and Maybe Lane, 304-ARANA-23 - Arana Creek At Mid-fork]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **36960** **Region 3**

Arana Gulch

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. Ten of the 22 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for Water Contact Recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of 22 samples exceeded the evaluation guideline for E. coli (USEPA 1996) as it is applied to the Water Contact Recreation objective. This exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36960, Escherichia coli (E. coli) **Region 3**

Arana Gulch

LOE ID:	10644
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36960, Escherichia coli (E. coli) **Region 3**

Arana Gulch

LOE ID:	10643
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36960, Escherichia coli (E. coli) **Region 3**

Arana Gulch

LOE ID:	18283

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arana Gulch to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 3 monitoring sites [304-ARANA-22 - Arana Creek at Paul Sweet Rd and Maybe Lane, 304-ARANA-23 - Arana Creek At Mid-fork, 304-ARANA-21 - Arana Creek At Harbor High fish ladder]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36960, Escherichia coli (E. coli) **Region 3**

Arana Gulch

LOE ID:	18282
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Arana Gulch to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 3 monitoring sites [304-ARANA-22 - Arana Creek at Paul Sweet Rd and Maybe Lane, 304-ARANA-23 - Arana Creek At Mid-fork, 304-ARANA-21 - Arana Creek At Harbor High fish ladder]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**46293**	**Region 3**
Arana Gulch		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seven of the 15 samples exceed the water quality objective for water contract recreation (i.e. swimming). One of the 15 samples also exceeded the water quality objective for non-contact recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 15 samples exceeded the Water Contact Recreation objective. This exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 46293, Fecal Coliform — Region 3

Arana Gulch

LOE ID:	10642
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46293, Fecal Coliform — Region 3

Arana Gulch

LOE ID:	10641
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Arana Gulch to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Arana Gulch was collected at 1 monitoring site [304ARA-Arana Gulch below golf course]
Temporal Representation:	Data was collected over the time period 1/19/2005-3/9/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Lockhart Gulch**
Water Body ID: **CAR3041204119990304141558**
Water Body Type: **River & Stream**

DECISION ID **41997** **Region 3**
Lockhart Gulch

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 31 samples exceed the water quality objective for Municipal and Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 31 samples exceed the water quality objective for Municipal and Domestic Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41997, Nitrate **Region 3**
Lockhart Gulch

LOE ID: 18662

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 31
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lockhart Gulch to determine beneficial use support and results are as follows: 0 of 31 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lockhart Gulch was collected at 1 monitoring site [304LOC_SCC - LOCKHART GULCH at BEAN CR.]
Temporal Representation:	Data was collected over the time period 8/30/1996-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**42072**	**Region 3**
Lockhart Gulch		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 28 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 28 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42072, Temperature, water **Region 3**

Lockhart Gulch

LOE ID:	19896
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lockhart Gulch to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Lockhart Gulch was collected at 1 monitoring site [304LOC_SCC - LOCKHART GULCH at BEAN CR.]
Temporal Representation:	Data was collected over the time period 8/30/1996-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **42074** **Region 3**

Lockhart Gulch

Pollutant: **Turbidity**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42074, Turbidity **Region 3**

Lockhart Gulch

LOE ID:	19684
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lockhart Gulch to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Lockhart Gulch was collected at 1 monitoring site [304LOC_SCC - LOCKHART GULCH at BEAN CR.]
Temporal Representation:	Data was collected on a single day 11/12/1996.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41505 Region 3
Lockhart Gulch

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Two lines of evidence are available in the administrative record to assess these pollutants. Fifteen of the 27 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifteen of the 27 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41505, Oxygen, Dissolved Region 3
Lockhart Gulch

LOE ID:	19814

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lockhart Gulch to determine beneficial use support and results are as follows: 15 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lockhart Gulch was collected at 1 monitoring site [304LOC_SCC - LOCKHART GULCH at BEAN CR.]
Temporal Representation:	Data was collected over the time period 8/30/1996-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41505, Oxygen, Dissolved **Region 3**

Lockhart Gulch

LOE ID:	19875
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lockhart Gulch to determine beneficial use support and results are as follows: 3 of 4 samples exceed the criterion for Oxygen,

	Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lockhart Gulch was collected at 1 monitoring site [304LOC_SCC - LOCKHART GULCH at BEAN CR.]
Temporal Representation:	Data was collected over the time period 8/30/1996-8/18/1997.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**44790**	**Region 3**
Lockhart Gulch		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Eleven of 28 samples exceed the Cold Freshwater Habitat water quality objective and this supports rejection of the null hypothesis. Other beneficial uses were not impaired. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of 28 samples exceed the Cold Freshwater Habitat water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44790, pH **Region 3**

Lockhart Gulch

LOE ID:	19717
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	28
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lockhart Gulch to determine beneficial use support and results are as follows: 11 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lockhart Gulch was collected at 1 monitoring site [304LOC_SCC - LOCKHART GULCH at BEAN CR.]
Temporal Representation:	Data was collected over the time period 8/30/1996-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44790, pH **Region 3**

Lockhart Gulch

LOE ID:	19720
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lockhart Gulch to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lockhart Gulch was collected at 1 monitoring site [304LOC_SCC - LOCKHART GULCH at BEAN CR.]
Temporal Representation:	Data was collected over the time period 8/30/1996-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44790, pH **Region 3**

Lockhart Gulch

LOE ID:	19718
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lockhart Gulch to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither

	be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lockhart Gulch was collected at 1 monitoring site [304LOC_SCC - LOCKHART GULCH at BEAN CR.]
Temporal Representation:	Data was collected over the time period 8/30/1996-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44790, pH **Region 3**

Lockhart Gulch

LOE ID:	19719
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lockhart Gulch to determine beneficial use support and results are as follows: 0 of 28 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lockhart Gulch was collected at 1 monitoring site [304LOC_SCC - LOCKHART GULCH at BEAN CR.]
Temporal Representation:	Data was collected over the time period 8/30/1996-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Bean Creek**
Water Body ID: **CAR3041204119990222152251**
Water Body Type: **River & Stream**

DECISION ID **34546** **Region 3**
Bean Creek

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status Revised
Sources: Source Unknown
TMDL Name: San Lorenzo River Sediment
TMDL Project Code: 243
Date TMDL Approved by USEPA: 02/19/2004
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment/pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. Although none of the four samples have degraded biological community composition (EPT taxa richness less than 12), two of the four sediment size samples had more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the four samples have more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34546, Sedimentation/Siltation **Region 3**

Bean Creek

LOE ID:	95244
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	2
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Bean Creek. At two of the four stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40% cover. However, more than 12 EPT taxa (EPT richness) were present at all four stations.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	Two monitoring locations: Bean Creek at Locateli Rd. (2008 and 2009), and Bean Creek at Morgan Runs (2008 and 2009).
Temporal Representation:	Samples were collected in the spring - early season of 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34546, Sedimentation/Siltation **Region 3**

Bean Creek

LOE ID:	3719
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

	2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	**36687**	**Region 3**
Bean Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Bean Creek provides habitat for coho salmon and steelhead trout, which are listed as a threatened species under the federal Endangered Species Act. Two lines of evidence are available in the administrative record to assess this pollutant. LOE 19898 summarizes 143 grab samples and none of those samples exceeded the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective. LOE 53338 summarizes two years of continuous temperature measurements which are evaluated by calculating maximum weekly maximum temperature (MWMT). Both of the two MWMTs exceed the evaluation guideline (MWMT for Central Coast Coho, NOAA, 2012) used to interpret the narrative water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 143 grab samples and 2 of the 2 MWMTs exceeded the relevant evaluation guidelines used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36687, Temperature, water **Region 3**

Bean Creek

LOE ID:	19898
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	143
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 143 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 10/9/1991-10/26/2005. Monitoring was not conducted on a set schedule but samples were collected approximately quarterly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36687, Temperature, water **Region 3**

Bean Creek

LOE ID:	53338
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two out of two samples exceed the evaluation guideline for temperature in this water body. Water temperature data submitted by the Lompico Watershed Conservancy from both of these sites showed that during the summer of 2005, the maximum weekly maximum temperature (MWMT) exceeded 16 degrees Celsius. The MWMT is calculated as an average and for the purpose of this assessment is counted as a single exceedance. These data were compiled by Donald Alley (fisheries biologist). For reference, the MWMT also exceeded 18 degrees in two out of two samples. This is the EPA temperature criterion for non-core salmon and trout.
Data Reference:	Data for temperature in San Lorenzo Creek (Monterey County) and other water bodies, May 2005-Aug. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Per the Central Coast Coho Salmon Recovery Plan, Vol III, pages 55-56 (NOAA, 2012) population level temperature rating of 16 degrees C (temperature expressed as maximum weekly maximum temperature or MWMT) are protective of juvenile coho during rearing season (summer). This threshold is protective of chronic exposure to elevated water temperatures which can result decline and absence of juvenile coho in habitats. This is also consistent with the 'U.S. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards' (USEPA 2003), in which the U.S. EPA recommends a criterion for the protection of moderate to high density summertime salmon and trout juvenile rearing (i.e., core juvenile rearing) of a maximum weekly maximum temperature (MWMT) of 16 degrees C. The MWMT is also known as the maximum 7-day average of daily maximums (7DADM). The 16 degrees C MWMT criterion is recommended to (1) safely protect juvenile salmon and trout from lethal temperatures; (2) provide upper optimal conditions for juvenile growth under limited food during the period of summer maximum temperatures and optimal temperatures for other times of the growth season; (3) avoid temperatures where juvenile salmon and trout are at a competitive disadvantage with other fish; (4) protect against temperature induced elevated disease rates; and (5) provide temperatures that studies show juvenile salmon and trout prefer and are found in high densities. Both the CDFG and NOAA strongly support the use of the USEPA temperature guidance for the purposes of water quality assessment in California. These criteria have been adopted by both Oregon and Washington state and used for 303(d) Listing and TMDL development by the North Coast Region Water Quality Control Board. Its use in other geographic settings is appropriate as it has been recognized that salmonid stocks do not tend to vary much in their life history thermal needs, regardless of their geographic location. There is not enough significant genetic variation among stocks or among species of salmonids to warrant geographically specific water temperature standards.
Guideline Reference:	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. U.S. Environmental Protection Agency Region 10 Office of Water, Seattle, WA. NOAA - Final Recovery Plan for Central California Coast coho salmon (Oncorhynchus kisutch) Evolutionarily Significant Unit.
Spatial Representation:	Two sites on Bean Creek: Site 14b-below Lockhart Gulch confluence, and Site 14c-Above MacKenzie confluence.
Temporal Representation:	Data collected daily from 6/19/2005-9/30/2005
Environmental Conditions:	
QAPP Information:	There was no QAPP submitted with this data, but detailed letters outlining QA/QC procedures were provided by the city of Santa Cruz and Donald Alley.
QAPP Information Reference(s):	

DECISION ID	37632	Region 3
Bean Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither of the two samples exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two samples exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37632, Fecal Coliform	**Region 3**
Bean Creek	

LOE ID:	18844
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 1 monitoring site [304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected on a single day 10/9/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37632, Fecal Coliform **Region 3**

Bean Creek

LOE ID:	18845
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 1 monitoring site [304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected on a single day 10/9/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 36908 Region 3
Bean Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 161 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 161 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36908, Nitrate Region 3
Bean Creek

LOE ID:	18663
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	161
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 161 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 5/15/1990-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36908, Nitrate **Region 3**

Bean Creek

LOE ID:	18680
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	161
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 161 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed

	in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 5/15/1990-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**36628**	**Region 3**
Bean Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Eight out of 152 samples exceed the water quality objective for Cold Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight out of 152 samples exceed the water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the median value did not exceed the General Objective. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36628, Oxygen, Dissolved — Region 3

Bean Creek

LOE ID:	19816
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	152
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 8 of 152 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 5/15/1990-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36628, Oxygen, Dissolved — Region 3

Bean Creek

LOE ID:	19892
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31

Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 12 of 31 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 1/6/1994-3/18/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**36799**	**Region 3**
Bean Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 153 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 153 samples exceed the water quality objective for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36799, Specific Conductivity **Region 3**

Bean Creek

LOE ID:	18585
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	153
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 153 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 5/15/1990-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **37219** **Region 3**

Bean Creek

Pollutant: **Turbidity**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 38 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 38 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37219, Turbidity **Region 3**

Bean Creek

LOE ID:	19665
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 1 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA, 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR.]
Temporal Representation:	Data was collected over the time period 5/15/1990-9/19/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**36914**	**Region 3**
Bean Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 153 samples exceed the Agricultural Supply, Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation water quality objectives, 16 of 153 samples exceed the Cold and Warm Freshwater Habitat water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 153 samples exceed the Agricultural Supply, Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation water quality objectives, and 16 of 153 samples exceed the Cold and Warm Freshwater Habitat water quality objectives. Therefore this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36914, pH	**Region 3**

Bean Creek

LOE ID:	19760
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	153
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 153 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 5/15/1990-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36914, pH **Region 3**

Bean Creek

LOE ID:	19759
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 153 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 5/15/1990-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36914, pH **Region 3**

Bean Creek

LOE ID:	19741
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	153
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 153 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 5/15/1990-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36914, pH **Region 3**

Bean Creek

LOE ID:	19758
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	153
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 0 of 153 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 5/15/1990-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36914, pH **Region 3**

Bean Creek

LOE ID:	19757
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	153
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bean Creek to determine beneficial use support and results are as follows: 16 of 153 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bean Creek was collected at 4 monitoring sites [304BNM_SCC - BEAN CR at MT HERMON RD (USGS), 304BNZ_SCC - BEAN CR. ABOVE ZAYANTE CR., 304BNL_SCC - BEAN CR. BELOW LOCKHART GULCH, 304BNG_SCC - BEAN CR. ABOVE GRAZING AREA]
Temporal Representation:	Data was collected over the time period 5/15/1990-10/26/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Mountain Charlie Gulch**
Water Body ID: **CAR3041204020020124160454**
Water Body Type: **River & Stream**

DECISION ID **34529** **Region 3**
Mountain Charlie Gulch

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34529, Sedimentation/Siltation **Region 3**
Mountain Charlie Gulch

LOE ID:	3971
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Lompico Creek**
Water Body ID: **CAR3041204019980826100810**
Water Body Type: **River & Stream**

DECISION ID	42365	Region 3
Lompico Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Domestic Pet Waste | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Watershed Pathogen TMDL (including San Lorenzo River, Lompico Creek, Carbonera Creek and the San Lorenzo River Estuary)
TMDL Project Code:	726
Date TMDL Approved by USEPA:	07/20/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for removal from the section 303(d) list under section 4.1 and 4.3 of the Listing Policy. Under section 4.3 a single line of evidence is necessary to assess listing status.

Note the pollutant name was changed from pathogens to fecal coliform in the 2014 assessment cycle because the only available supporting data is for fecal coliform.

Two lines of evidence are available in the administrative record to assess this pollutant. Although the original data used to place this waterbody on the Section 303(d) list in not included in the assessment database, recent data indicated impairment. Six of 22 samples exceed the water quality objective for Water Contact Recreation. Zero of the 22 samples exceeds the Non-Contact Recreation objective, so this beneficial use is fully supported. This water segment/pollutant combination is being addressed in the TMDL for the San Lorenzo River Watershed Pathogen TMDL which sets TMDL targets for fecal coliform in Lompico Creek.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 22 samples exceed the water quality objective for Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The San Lorenzo River Watershed Pathogen TMDL has been approved by USEPA on July 20, 2011.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42365, Fecal Coliform **Region 3**

Lompico Creek

LOE ID:	18823
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	22
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 6 of 22 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-12/3/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42365, Fecal Coliform **Region 3**

Lompico Creek

LOE ID:	3959
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42365, Fecal Coliform **Region 3**

Lompico Creek

LOE ID:	18824
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	22
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 22 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-12/3/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	42277	Region 3
Lompico Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Onsite Wastewater Systems (Septic Tanks) | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Nitrate
TMDL Project Code:	519
Date TMDL Approved by USEPA:	01/14/2003
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

The pollutant name has been changed from Nutrients to Nitrate to be consistent with the TMDL for this water segment and pollutant.

Seven LOEs are available in the administrative record to assess this pollutant. The Municipal and Domestic Supply use (i.e. drinking water) is assessed using both the Central Coast Basin Plan water quality objective for Municipal and Domestic Supply (10 mg/L as N) and the Lompico Creek TMDL numeric target for drinking water (1.5 mg/L as N). The TMDL numeric target meets the criteria of the Listing Policy (Section 6.1.3) as it is applicable to the beneficial use, protective of the beneficial use, linked to the pollutant under consideration, scientifically based and peer reviewed, well described and identified a range above which negative impacts will occur.

Two LOEs summarize the data compared to the TMDL numeric target for Lompico Creek (LOEs 26447 and 79038). Thirteen of the 100 samples exceed the TMDL target. The beneficial use support rating for these LOEs is set at Not Supporting. Note, only data collected since 1997 were compared to the TMDL target and this is why the sample count in this LOE differs from the other LOEs. Two additional LOEs summarize data compared to the water quality objective for Municipal and Domestic Supply (LOEs 18642 and 54663) and zero of the 159 samples exceed this objective. The beneficial use support rating for these LOEs is set at Fully Supporting.

Two LOEs summarize data compared to the water quality objective for Agricultural Supply (LOEs 18647 and 54664) and zero of the 159 samples exceed this objective. The beneficial use support rating for these LOEs is set at Fully Supporting.

One LOE is used as a place holder for the original decision to add Lompico Creek to the 303(d) list. However this decision was made prior to the creation of this assessment data base and there is no data or information supporting this LOE. The beneficial use support rating for this LOE is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirteen of the 100 samples exceed the numeric target from the TMDL and this exceeds the allowable frequency calculated from the equation in Table 4.1 of the Listing Policy.
4. The San Lorenzo River Watershed Nitrate TMDL was approved by USEPA on January 14, 2003.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42277, Nitrate **Region 3**

Lompico Creek

LOE ID:	18642
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	158
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 158 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42277, Nitrate **Region 3**

Lompico Creek

LOE ID:	18641
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	158
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 158 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42277, Nitrate **Region 3**

Lompico Creek

LOE ID:	26447

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	99
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data collected by Santa Cruz County Environmental Health staff from the Lompico Creek are assessed relative to the numeric target for Nitrate, established by Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed. Thirteen of 99 samples exceed the numeric target.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin has the following narrative General Objective: Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed (specifically including Lompico Creek) established the following numeric target for Nitrate: 1.5 mg/L Nitrate as NO3 (or 0.33 mg/L Nitrate as N).
Guideline Reference:	San Lorenzo River Nitrate TMDL
Spatial Representation:	Data were collected by Santa Cruz County Environmental Health staff from the Lompico Creek at Carrol Ave. (304LOM).
Temporal Representation:	Santa Cruz County Environmental Health staff conducted monitoring at Lompico Creek at Carrol Ave (304LOM).
Environmental Conditions:	
QAPP Information:	Santa Cruz County Environmental Health monitoring program QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42277, Nitrate **Region 3**

Lompico Creek

LOE ID:	1843
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	

Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42277, Nitrate **Region 3**

Lompico Creek

LOE ID: 79038

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference: Statewide Perennial Streams Assessment 2008

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed (specifically including Lompico Creek) established the following numeric target for Nitrate: 1.5 mg/L Nitrate as NO3 (or 0.33 mg/L Nitrate as N).
Objective/Criterion Reference: Maximum Contaminant Levels for organic and inorganic chemicals, CCR

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation: Data was collected on a single day 6/4/2008.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42277, Nitrate **Region 3**

Lompico Creek

LOE ID: 54663

Pollutant: Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Water Quality Control Plan, Central Coast Region is 10.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42277, Nitrate **Region 3**

Lompico Creek

LOE ID:	54664
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrate + nitrite for livestock watering is 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]

Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47957 Region 3
Lompico Creek

Pollutant:	**Alkalinity as CaCO3**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47957, Alkalinity as CaCO3 Region 3
Lompico Creek

LOE ID:	54656
Pollutant:	Alkalinity as CaCO3
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Alkalinity as CaCO3.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Alkalinity as CaCO3 criteria for the protection of freshwater aquatic life is 20000 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	47958	Region 3
Lompico Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for unionized ammonia set to protect aquatic life or the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47958, Ammonia — Region 3

Lompico Creek

LOE ID:	54658
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47958, Ammonia — Region 3

Lompico Creek

LOE ID:	54657
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.

Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47959 Region 3

Lompico Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for agricultural uses Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47959, Chloride Region 3

Lompico Creek

LOE ID:	54662

Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chloride.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**47961**	**Region 3**
Lompico Creek		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objectives for drinking water or agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objectives and this does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47961, Nitrogen, Nitrite **Region 3**

Lompico Creek

LOE ID:	54665
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrite (as N) is 1.0 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47961, Nitrogen, Nitrite **Region 3**

Lompico Creek

LOE ID:	54666
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrite as N.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**42060**	**Region 3**
Lompico Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess these pollutants. One of the 163 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 163 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42060, Oxygen, Dissolved **Region 3**

Lompico Creek

LOE ID:	54670
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 42060, Oxygen, Dissolved **Region 3**

Lompico Creek

LOE ID:	19834
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	162
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 1 of 162 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-

	1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42060, Oxygen, Dissolved **Region 3**

Lompico Creek

LOE ID:	19895
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 5 of 34 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [

	304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 10/19/1993-5/27/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **42061** **Region 3**

Lompico Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 163 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 163 samples exceed the water quality objective for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42061, Specific Conductivity **Region 3**

Lompico Creek

LOE ID:	18587
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	162

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 162 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42061, Specific Conductivity **Region 3**

Lompico Creek

LOE ID:	54679
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 41533 Region 3

Lompico Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 168 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 168 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41533, Temperature, water Region 3

Lompico Creek

LOE ID:	54681
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41533, Temperature, water **Region 3**

Lompico Creek

LOE ID:	19933
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	167
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 1 of 167 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41483 Region 3
Lompico Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Three of the 168 samples exceed the water quality objective for Agriculture, five of the 168 samples exceed the water quality objective for Cold Freshwater Habitats, and four of the 168 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Three of the 168 samples exceed the water quality objective for Agriculture, five of the 168 samples exceed the water quality objective for Cold Freshwater Habitats, and four of the 168 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41483, pH Region 3
Lompico Creek

LOE ID:	18810
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	167
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 4 of 167 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41483, pH **Region 3**

Lompico Creek

LOE ID:	18811
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	167
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 4 of 167 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41483, pH **Region 3**

Lompico Creek

LOE ID:	18796
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	167
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 5 of 167 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41483, pH **Region 3**

Lompico Creek

LOE ID:	19801
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	167
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 4 of 167 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41483, pH **Region 3**

Lompico Creek

LOE ID:	18795
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	167
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 3 of 167 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41483, pH **Region 3**

Lompico Creek

LOE ID:	54675
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41483, pH **Region 3**

Lompico Creek

LOE ID:	54674
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41483, pH **Region 3**

Lompico Creek

LOE ID:	54673
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41483, pH **Region 3**

Lompico Creek

LOE ID:	54671
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41483, pH **Region 3**

Lompico Creek

LOE ID:	54672
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed SWAMP data for Lompico Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Statewide Perennial Streams Assessment 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [Lompico Creek - 304PS0018]
Temporal Representation:	Data was collected on a single day 6/4/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**41532**	**Region 3**
Lompico Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 151 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 151 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation:	No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41532, Turbidity **Region 3**

Lompico Creek

LOE ID:	19683
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	151
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Lompico Creek to determine beneficial use support and results are as follows: 1 of 151 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Lompico Creek was collected at 1 monitoring site [304LOM_SCC - LOMPICO CR at CARROL AVE]
Temporal Representation:	Data was collected over the time period 1/3/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **34710** **Region 3**

Lompico Creek

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Erosion/Siltation | Highway/Road/Bridge Construction | Land Development | Logging Road Construction/Maintenance

TMDL Name:	San Lorenzo River Sediment
TMDL Project Code:	243
Date TMDL Approved by USEPA:	02/19/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for delisting under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. The San Lorenzo Sediment TMDL was approved by the RWQCB in May 2003 and subsequently approved by USEPA in February 2004. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list. No additional data is available to alter this listing.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34710, Sedimentation/Siltation **Region 3**

Lompico Creek

LOE ID:	1844
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Newell Creek (Lower)**
Water Body ID: **CAR3041203120020219170752**
Water Body Type: **River & Stream**

DECISION ID **42043** **Region 3**
Newell Creek (Lower)

Pollutant: **Temperature, water**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 147 grab samples exceed the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective. In addition, LOE 55558 summarizes 106 days of continuous temperature measurements which are evaluated by calculating maximum weekly maximum temperature (MWMT). The MWMT does exceed the evaluation guideline applied to long term continuous temperature data (MWMT for Central Coast Coho, NOAA, 2012) used to interpret the narrative water quality objective. For reference, the MWMT was exceeded on 47 of the 106 days but the MWMT did not exceeded 18 degrees in Newell Creek during the period of measurement. Eighteen degrees is the EPA temperature criterion for non-core salmon and trout. However, for this assessment, the 16 degree MWMT is used as it is more appropriate and protective for this waterbody.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 147 grab samples and the single MWMT calculated value exceed the evaluation guidelines but, this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42043, Temperature, water **Region 3**
Newell Creek (Lower)

LOE ID: 19934

Pollutant: Temperature, water
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	147
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 0 of 147 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42043, Temperature, water **Region 3**

Newell Creek (Lower)

LOE ID:	55558
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water temperature data submitted by the Lompico Watershed Conservancy from the summer months of 2005 showed that the maximum weekly maximum temperature (MWMT) exceeded 16 degrees Celsius because of co-existance with Coho historically in this watershed. The MWMT is an average for the year and therefore, for the purpose of this assessment is counted as a single sample and exceedance.

	The temperature ranged from 13.97 - 17.46 and did not exceed18 during the period of record. A total of 106 MWMTs were calculated and of those, 47 days had an MWMT that exceeded 16 degrees.
Data Reference:	Data for temperature in San Lorenzo Creek (Monterey County) and other water bodies, May 2005-Aug. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Per the Central Coast Coho Salmon Recovery Plan, Vol III, pages 55-56 (NOAA, 2012) population level temperature rating of 16 degrees C (temperature expressed as maximum weekly maximum temperature or MWMT) are protective of juvenile coho during rearing season (summer). This threshold is protective of chronic exposure to elevated water temperatures which can result decline and absence of juvenile coho in habitats. This is also consistent with the 'U.S. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards' (USEPA 2003), in which the U.S. EPA recommends a criterion for the protection of moderate to high density summertime salmon and trout juvenile rearing (i.e., core juvenile rearing) of a maximum weekly maximum temperature (MWMT) of 16 degrees C. The MWMT is also known as the maximum 7-day average of daily maximums (7DADM). The 16 degrees C MWMT criterion is recommended to (1) safely protect juvenile salmon and trout from lethal temperatures; (2) provide upper optimal conditions for juvenile growth under limited food during the period of summer maximum temperatures and optimal temperatures for other times of the growth season; (3) avoid temperatures where juvenile salmon and trout are at a competitive disadvantage with other fish; (4) protect against temperature induced elevated disease rates; and (5) provide temperatures that studies show juvenile salmon and trout prefer and are found in high densities. Both the CDFG and NOAA strongly support the use of the USEPA temperature guidance for the purposes of water quality assessment in California.
Guideline Reference:	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. U.S. Environmental Protection Agency Region 10 Office of Water, Seattle, WA. NOAA - Final Recovery Plan for Central California Coast coho salmon (Oncorhynchus kisutch) Evolutionarily Significant Unit.
Spatial Representation:	Data collected at site 16: Just upstream of the Rancho Rio Bridge.
Temporal Representation:	Data collected daily from 6/11/2005-9/29/2005.
Environmental Conditions:	
QAPP Information:	There was no QAPP submitted with this data, but detailed letters outlining QA/QC procedures were provided by the city of Santa Cruz and Donald Alley.
QAPP Information Reference(s):	

DECISION ID	**41179**	**Region 3**
Newell Creek (Lower)		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 147 samples exceed the water quality objectives for Municipal & Domestic Supply or for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 147 samples exceed the water quality objectives for Municipal & Domestic Supply or for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41179, Nitrate **Region 3**

Newell Creek (Lower)

LOE ID:	18698
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	147
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 0 of 147 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41179, Nitrate **Region 3**

Newell Creek (Lower)

LOE ID:	18699
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	147
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 0 of 147 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41161 Region 3

Newell Creek (Lower)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess these pollutants. Two of the 144 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 144 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are ot met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41161, Oxygen, Dissolved — Region 3

Newell Creek (Lower)

LOE ID:	19911
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-

	2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 2 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM]
Temporal Representation:	Data was collected over the time period 8/23/1996-8/21/1997.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41161, Oxygen, Dissolved **Region 3**

Newell Creek (Lower)

LOE ID:	19836
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	144
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 2 of 144 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]

Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41177 Region 3

Newell Creek (Lower)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 147 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 147 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41177, Specific Conductivity Region 3

Newell Creek (Lower)

LOE ID:	18602
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	147
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support

	and results are as follows: 0 of 147 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41044**	**Region 3**
Newell Creek (Lower)		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 82 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 82 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation:	No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41044, Turbidity **Region 3**

Newell Creek (Lower)

LOE ID:	19230
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	82
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 0 of 82 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 1 monitoring site [304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 2/24/1999-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **41106** **Region 3**

Newell Creek (Lower)

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Five lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-six of the 146 samples exceeded the Cold Freshwater Habitat water quality objective for pH and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41106, pH **Region 3**

Newell Creek (Lower)

LOE ID:	19817
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	146
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 1 of 146 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41106, pH **Region 3**

Newell Creek (Lower)

LOE ID:	19818
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	146
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 26 of 146 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41106, pH **Region 3**

Newell Creek (Lower)

LOE ID:	19819
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	146
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 1 of 146 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41106, pH **Region 3**

Newell Creek (Lower)

LOE ID:	19820
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	146
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 1 of 146 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41106, pH **Region 3**

Newell Creek (Lower)

LOE ID:	19821
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	146
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Newell Creek to determine beneficial use support and results are as follows: 1 of 146 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Newell Creek was collected at 3 monitoring sites [

	304NCR_SCC - NEWELL CR. at RANCHO RIO, 304NCB_SCC - NEWELL CR. BELOW DAM, 304NEW_SCC - NEWELL CRK at SLR IN GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/23/1996-4/26/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Newell Creek (Upper)**
Water Body ID: **CAR3041203120020124115808**
Water Body Type: **River & Stream**

DECISION ID **44596** **Region 3**
Newell Creek (Upper)

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44596, Sedimentation/Siltation **Region 3**
Newell Creek (Upper)

LOE ID: 3973

Pollutant: Sedimentation/Siltation
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: Placeholder reference pre-2006 303(d)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: Placeholder reference pre-2006 303(d)

Evaluation Guideline: Unspecified
Guideline Reference: Placeholder reference pre-2006 303(d)

Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Bear Creek(Santa Cruz County)**
Water Body ID: **CAR3041203019990222153339**
Water Body Type: **River & Stream**

DECISION ID **34433** **Region 3**
Bear Creek(Santa Cruz County)

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status Revised
Sources: Channel Erosion | Highway/Road/Bridge Construction | Logging Road Construction/Maintenance | Removal of Riparian Vegetation
TMDL Name: San Lorenzo River Sediment
TMDL Project Code: 243
Date TMDL Approved by USEPA: 02/19/2004
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment/pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. None of the five samples have degraded biological community composition (EPT taxa richness less than 12) nor do they have more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This sample count is insufficient to determine if the if the stream is no longer impaired for sediment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the five samples have degraded biological community composition (EPT taxa richness less than 12) nor do they have more than 40 percent cover of deposited fine and sand sized sediment on the streambed. However there are an insufficient number of sample to remove this water body segment-pollution combination from the List.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34433, Sedimentation/Siltation **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	3720
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34433, Sedimentation/Siltation **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	95246
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Bear Creek. At zero of the five stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. In addition, zero of the samples had less than 12 EPT taxa (EPT richness) which is the threshold for degraded biological diversity and community composition at these locations.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of

	material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% cover relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	Three monitoring locations: Scout Camp (2007), treatment plant (2008, 2009), and Eurella (2008 and 2009).
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

DECISION ID	**36234**	**Region 3**
Bear Creek(Santa Cruz County)		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE summarizes unionized ammonia data. Zero of 14 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. One LOE summarizes total ammonia data and zero of the 15 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 10451) and total ammonia (Decision 10454). This decision contains all of the LOEs from those decisions in addition to new LOEs. Note, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 14 samples exceed the Basin Plan general objective for unionized ammonia and zero of the 15 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle. After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36234, Ammonia **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	9168
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36234, Ammonia **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	9169
Pollutant:	Ammonia (Unionized)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41419 Region 3

Bear Creek(Santa Cruz County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four lines of evidence are available in the administrative record to assess this pollutant. LOEs 12169, 12152 and 19597 summarizes 142 grab samples and one of those samples exceeded the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective. LOE 53337 summarizes two years of continuous temperature measurements which are evaluated by calculating maximum weekly maximum temperature (MWMT). Both of the two MWMTs exceed the evaluation guideline (MWMT for Central Coast Coho, NOAA, 2012) used to interpret the narrative water

quality objective.

Bear Creek provides habitat for coho salmon and steelhead trout, which are listed as a threatened species under the federal Endangered Species Act.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 142 grab samples and 2 of the 2 MWMTs exceeded the relevant evaluation guidelines used to interpret the narrative water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41419, Temperature, water **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	12169
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]

Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41419, Temperature, water **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19597
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	125
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 125 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 6/10/1998-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41419, Temperature, water **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	12152

Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41419, Temperature, water **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	53337
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two out of two samples exceed the evaluation guideline for temperature in this water body. Water temperature data submitted by the Lompico Watershed Conservancy from the summer months of 2005 and 2006 showed that the maximum weekly maximum temperature

	(MWMT) exceeded 16 degrees Celsius. The MWMT is an average for the year and therefore, for the purpose of this assessment is counted as a single sample and exceedance. These data were compiled by Donald Alley (fisheries biologist). For reference, the MWMT also exceeded 18 degrees in two out of two samples. This is the EPA temperature criterion for non-core salmon and trout. However, for this assessment the 16 degree MWMT is used as it is more appropriate for this waterbody.
Data Reference:	Data for temperature in San Lorenzo Creek (Monterey County) and other water bodies, May 2005-Aug. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Per the Central Coast Coho Salmon Recovery Plan, Vol III, pages 55-56 (NOAA, 2012) population level temperature rating of 16 degrees C (temperature expressed as maximum weekly maximum temperature or MWMT) are protective of juvenile coho during rearing season (summer). This threshold is protective of chronic exposure to elevated water temperatures which can result decline and absence of juvenile coho in habitats. This is also consistent with the 'U.S. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards' (USEPA 2003), in which the U.S. EPA recommends a criterion for the protection of moderate to high density summertime salmon and trout juvenile rearing (i.e., core juvenile rearing) of a maximum weekly maximum temperature (MWMT) of 16 degrees C. The MWMT is also known as the maximum 7-day average of daily maximums (7DADM). The 16 degrees C MWMT criterion is recommended to (1) safely protect juvenile salmon and trout from lethal temperatures; (2) provide upper optimal conditions for juvenile growth under limited food during the period of summer maximum temperatures and optimal temperatures for other times of the growth season; (3) avoid temperatures where juvenile salmon and trout are at a competitive disadvantage with other fish; (4) protect against temperature induced elevated disease rates; and (5) provide temperatures that studies show juvenile salmon and trout prefer and are found in high densities. Both the CDFG and NOAA strongly support the use of the USEPA temperature guidance for the purposes of water quality assessment in California. These criteria have been adopted by both Oregon and Washington state and used for 303(d) Listing and TMDL development by the North Coast Region Water Quality Control Board. Its use in other geographic settings is appropriate as it has been recognized that salmonid stocks do not tend to vary much in their life history thermal needs, regardless of their geographic location. There is not enough significant genetic variation among stocks or among species of salmonids to warrant geographically specific water temperature standards.
Guideline Reference:	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. U.S. Environmental Protection Agency Region 10 Office of Water, Seattle, WA.
Spatial Representation:	Data collected at site 18a-Above Hopkins Gulch and Oso Viejo Bridge.
Temporal Representation:	Data collected daily from 6/11/2005-10/09/2006.
Environmental Conditions:	
QAPP Information:	There was no QAPP submitted with this data, but detailed letters outlining QA/QC procedures were provided by the city of Santa Cruz and Donald Alley.
QAPP Information Reference(s):	

DECISION ID	**36308**	**Region 3**
Bear Creek(Santa Cruz County)		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 15 samples exceeded the Agricultural Supply Objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36308, Boron **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	9170
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the

	maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41413 Region 3

Bear Creek(Santa Cruz County)

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41413, Chloride Region 3

Bear Creek(Santa Cruz County)

LOE ID:	9171

Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41414** **Region 3**

Bear Creek(Santa Cruz County)

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the

General Water Quality Objective set to protect aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 15 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41414, Chlorophyll-a **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	9172
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41564 Region 3

Bear Creek(Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Four of the 16 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 16 samples exceed the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 16 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 16 samples exceed the water quality objective for Non-Contact Recreationand and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41564, Escherichia coli (E. coli) Region 3

Bear Creek(Santa Cruz County)

LOE ID:	10424
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 4 of 16 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41564, Escherichia coli (E. coli) **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10425
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41575**	**Region 3**
Bear Creek(Santa Cruz County)		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 16 samples exceed the water quality objective for Water Contact Recreation. None of the 16 samples exceed the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 16 samples exceed the water quality objective for Water Contact Recreation. None of the 16 samples exceed the water quality objective for Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41575, Fecal Coliform **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10677
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41575, Fecal Coliform **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10678
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41388** **Region 3**

Bear Creek(Santa Cruz County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 20 samples exceed the water quality objective for Municipal and Domestic Supply and Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 20 samples exceed the water quality objective for Municipal and Domestic Supply and Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41388, Nitrate **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	9173
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41388, Nitrate **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19707
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 5/28/2002-6/1/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41388, Nitrate **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	9188
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41388, Nitrate **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19690
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-

	2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 5/28/2002-6/1/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**42350**	**Region 3**
Bear Creek(Santa Cruz County)		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 139 samples exceed the water quality objective for Cold Freshwater Habitat and 1 of 17 samples exceed the general water quality objective for oxygen saturation. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 139 samples exceed the water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the median value did not exceed the General Objective. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42350, Oxygen, Dissolved **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19730
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	122
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 122 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 6/10/1998-7/31/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42350, Oxygen, Dissolved **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	12167
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42350, Oxygen, Dissolved **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	12168
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42350, Oxygen, Dissolved **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	12150
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42350, Oxygen, Dissolved **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	12149
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41418** **Region 3**

Bear Creek(Santa Cruz County)

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed.

Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objective for Agricultural Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 15 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41418, Sodium **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	9189
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41563 Region 3

Bear Creek(Santa Cruz County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision. Zero of the 141 samples exceed the water quality objective for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 141 samples exceed the water quality objective for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41563, Specific Conductivity Region 3

Bear Creek(Santa Cruz County)

LOE ID:	10443
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41563, Specific Conductivity **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19783
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	124
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 124 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 6/10/1998-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41563, Specific Conductivity **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10423
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1

	monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41415 **Region 3**

Bear Creek(Santa Cruz County)

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 118 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 118 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41415, Turbidity **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19326
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	110
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 110 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 5/4/1999-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41415, Turbidity **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	12166
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect

	beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 8/10/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41587 Region 3

Bear Creek(Santa Cruz County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fifteen lines of evidence are available in the administrative record to assess this pollutant. None of the 139 samples exceed the Agricultural Supply water quality objective or the Cold Freshwater Habitat water quality objective. Four of the 139 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 139 samples exceed the Agricultural Supply water quality objective or the Cold Freshwater Habitat water quality objective. Four of the 139 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41587, pH Region 3

Bear Creek(Santa Cruz County)

LOE ID:	19925
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	123
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 123 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 6/10/1998-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19926
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	123
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 123 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 6/10/1998-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19634
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	123
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 123 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 6/10/1998-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10460
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10461
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10444
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10426
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five

	annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10427
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10440
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10441
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10442
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10458
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	10459
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BEP-Bear Creek at Little Bear Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19927
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	123
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 123 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 6/10/1998-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41587, pH **Region 3**

Bear Creek(Santa Cruz County)

LOE ID:	19924
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	123
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Bear Creek(Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 123 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Bear Creek(Santa Cruz County) was collected at 1 monitoring site [304BRC_SCC - BEAR CR. at SCOUT CAMP]
Temporal Representation:	Data was collected over the time period 6/10/1998-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Zayante Creek**
Water Body ID: **CAR3041202220020124155410**
Water Body Type: **River & Stream**

DECISION ID **34297** **Region 3**
Zayante Creek

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Channel Erosion | Habitat Modification | Other Urban Runoff | Removal of Riparian Vegetation | Road Construction
TMDL Name:	San Lorenzo River Sediment
TMDL Project Code:	243
Date TMDL Approved by USEPA:	02/19/2004
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment-pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. None of the five samples have degraded biological community composition (EPT taxa richness less than 12) associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed. However, there are an insufficient number of samples to determine beneficial use support.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the five samples have degraded biological community composition (EPT taxa richness less than 12) associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34297, Sedimentation/Siltation **Region 3**

Zayante Creek

LOE ID:	95256
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Zayante Creek. At zero of the five stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. In addition, none of the five stations had less than 12 EPT taxa (EPT richness) present, the threshold indicating degraded biological diversity and community composition at these locations.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	Two monitoring locations: Creek RR bridge (2007, 2008, 2009), Quail Hollow (2008), Market bdg (2008).
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34297, Sedimentation/Siltation **Region 3**

Zayante Creek

LOE ID:	4022
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID **36890** **Region 3**

Zayante Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. Four lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective for Agricultural Supply. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the water quality objective for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36890, Specific Conductivity — Region 3

Zayante Creek

LOE ID:	18568
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	262
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 262 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36890, Specific Conductivity — Region 3

Zayante Creek

LOE ID:	17424
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36890, Specific Conductivity **Region 3**

Zayante Creek

LOE ID:	10231
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36890, Specific Conductivity **Region 3**

Zayante Creek

LOE ID:	10268
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36291	Region 3
Zayante Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Three of the 287 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 287 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36291, Temperature, water	**Region 3**
Zayante Creek	

LOE ID:	11993
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36291, Temperature, water **Region 3**

Zayante Creek

LOE ID:	18769
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36291, Temperature, water **Region 3**

Zayante Creek

LOE ID:	19878
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	262
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 262 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 3/11/1992-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36291, Temperature, water **Region 3**

Zayante Creek

LOE ID:	12010
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36291, Temperature, water **Region 3**

Zayante Creek

LOE ID:	58994
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water temperature data submitted by the Lompico Watershed Conservancy from the

	summer months of 2005 from one location and in 2006 from two locations in the water body showed that the maximum weekly maximum temperature (MWMT) exceeded 16 degrees Celsius because of co-existance with Coho historically in this watershed. The MWMT is an average for the year and therefore, for the purpose of this assessment is counted as a single sample and exceedance. These data were compiled by Donald Alley (fisheries biologist).
Data Reference:	Data for temperature in San Lorenzo Creek (Monterey County) and other water bodies, May 2005-Aug. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Per 'U.S. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards' (USEPA 2003), the U.S. EPA recommends a criterion for the protection of moderate to high density summertime salmon and trout juvenile rearing (i.e., core juvenile rearing) of a maximum weekly maximum temperature (MWMT) of 16 degrees C. The MWMT is also known as the maximum 7-day average of daily maximums (7DADM). The 16 degrees C MWMT criterion is recommended to (1) safely protect juvenile salmon and trout from lethal temperatures; (2) provide upper optimal conditions for juvenile growth under limited food during the period of summer maximum temperatures and optimal temperatures for other times of the growth season; (3) avoid temperatures where juvenile salmon and trout are at a competitive disadvantage with other fish; (4) protect against temperature induced elevated disease rates; and (5) provide temperatures that studies show juvenile salmon and trout prefer and are found in high densities. Both the CDFG and NOAA strongly support the use of the USEPA temperature guidance for the purposes of water quality assessment in California. These criteria have been adopted by both Oregon and Washington state and used for 303(d) Listing and TMDL development by the North Coast Region Water Quality Control Board. Its use in other geographic settings is appropriate as it has been recognized that salmonid stocks do not tend to vary much in their life history thermal needs, regardless of their geographic location. There is not enough significant genetic variation among stocks or among species of salmonids to warrant geographically specific water temperature standards.
Guideline Reference:	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. U.S. Environmental Protection Agency Region 10 Office of Water, Seattle, WA.
Spatial Representation:	Data collected at sites 13a: Mt. Hermon above Graham Hill Road Bridge; and 13d: Above second bridge crossing above Lompico Road Junction, approx. 1 mile downstream of Mt. Charlie confluence.
Temporal Representation:	Data collected daily at site 13d from 6/18/2005 thru 9/28/2005, and sites 13a and 13d from 7/22/06 thru 10/05/06.
Environmental Conditions:	
QAPP Information:	There was no QAPP submitted with this data, but detailed letters outlining QA/QC procedures were provided by the city of Santa Cruz and Donald Alley.
QAPP Information Reference(s):	

DECISION ID	**42322**	**Region 3**
Zayante Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown

TMDL Name:	San Lorenzo/Zayante Chlorpyrifos TMDL
TMDL Project Code:	1060
Date TMDL Approved by USEPA:	11/25/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under 3.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of two water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the two samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. 4. The San Lorenzo/Zayante Chlorpyrifos TMDL has been approved by the USEPA on November 25, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42322, Chlorpyrifos **Region 3**

Zayante Creek

LOE ID:	16175
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2

Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Zayante Creek to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36775**	**Region 3**
Zayante Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE summarize unionized ammonia data in which zer0 of the 14 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. This sample size is insufficient to determine,

with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Two LOEs summarize total ammonia data and one of the 16 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 14 samples exceed the water quality objective for unionized ammonia and one of the 16 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36775, Ammonia **Region 3**

Zayante Creek

LOE ID:	18774
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [

	304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR.]
Temporal Representation:	Data was collected on a single day 8/21/1996.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36775, Ammonia **Region 3**

Zayante Creek

LOE ID:	9259
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36775, Ammonia **Region 3**

Zayante Creek

LOE ID:	9258
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36974	Region 3
Zayante Creek		

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 15 samples exceeded the Agricultural Supply water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36974, Boron **Region 3**

Zayante Creek

LOE ID:	9272
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38283	Region 3
Zayante Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38283, Chlorophyll-a	**Region 3**
Zayante Creek	

LOE ID:	9273
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples

	exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42489**	**Region 3**
Zayante Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Neither of the 2 samples exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42489, Diazinon **Region 3**

Zayante Creek

LOE ID:	16609
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring

	includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37011** **Region 3**

Zayante Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 18 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and none of the 18 samples exceed the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of the 18 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and none of the 18 samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37011, Escherichia coli (E. coli) **Region 3**

Zayante Creek

LOE ID:	18427
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37011, Escherichia coli (E. coli) **Region 3**

Zayante Creek

LOE ID:	10232
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37011, Escherichia coli (E. coli) **Region 3**

Zayante Creek

LOE ID:	18428
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37011, Escherichia coli (E. coli) **Region 3**

Zayante Creek

LOE ID:	10233
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36892**	**Region 3**
Zayante Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. None of the samples exceed the Agricultural Supply or Municipal & Domestic Supply water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 282 samples exceed the Agricultural Supply or Municipal & Domestic Supply water quality objectives, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36892, Nitrate **Region 3**

Zayante Creek

LOE ID:	9275
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36892, Nitrate **Region 3**

Zayante Creek

LOE ID:	9274
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36892, Nitrate **Region 3**

Zayante Creek

LOE ID:	18624
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	264
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 264 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36892, Nitrate **Region 3**

Zayante Creek

LOE ID:	18623
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	264
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 264 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-

	2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36892, Nitrate **Region 3**

Zayante Creek

LOE ID:	18225
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36892, Nitrate **Region 3**

Zayante Creek

LOE ID:	18226
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **36290** **Region 3**

Zayante Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Three of the 280 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 280 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36290, Oxygen, Dissolved **Region 3**

Zayante Creek

LOE ID:	11995
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36290, Oxygen, Dissolved **Region 3**

Zayante Creek

LOE ID:	18198
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36290, Oxygen, Dissolved **Region 3**

Zayante Creek

LOE ID:	19873
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	67
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 4 of 67 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 1/6/1994-5/27/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36290, Oxygen, Dissolved **Region 3**

Zayante Creek

LOE ID:	19812
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	258
Number of Exceedances:	3

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 3 of 258 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36290, Oxygen, Dissolved **Region 3**

Zayante Creek

LOE ID:	11975
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36290, Oxygen, Dissolved **Region 3**

Zayante Creek

LOE ID:	11996
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36290, Oxygen, Dissolved **Region 3**

Zayante Creek

LOE ID:	11976
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37724** **Region 3**

Zayante Creek

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results (or endpoints) but will be counted only once. One sample is defined as being collected on the same day at the same location. Two samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and zero of the two samples resulted in a significant toxic effect to one or more test organisms and therefore did not exceed the water quality objective for aquatic life protection.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the two samples resulted in a significant toxic effect to one or more test organisms and therefore did not exceed the water quality objective for aquatic life protection and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37724, Toxicity **Region 3**

Zayante Creek

LOE ID:	24726
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37724, Toxicity **Region 3**

Zayante Creek

LOE ID:	24727
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

	December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37724, Toxicity **Region 3**

Zayante Creek

LOE ID:	24721
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38284	Region 3
Zayante Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Five out of 222 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five out of 222 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38284, Turbidity	**Region 3**
Zayante Creek	

LOE ID:	19648
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	209
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

Data Reference:	Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 3 of 209 samples exceed the criterion for Turbidity(NTU). Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38284, Turbidity **Region 3**

Zayante Creek

LOE ID:	11994
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.

Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 2/16/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38284, Turbidity **Region 3**

Zayante Creek

LOE ID:	18724
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **36250** **Region 3**

Zayante Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Seven of 288 samples exceed the Agricultural Supply water quality objective, 8 of 288 samples exceed the Cold Freshwater Habitat water quality objective and 13 of 288 samples exceed the numeric objective for Municipal & Domestic Supply, Non-contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 288 samples exceed the Agricultural Supply water quality objective, 8 of 288 samples exceed the Cold Freshwater Habitat water quality objective and 13 of 288 samples exceed the numeric objective for Municipal & Domestic Supply, Non-contact Recreation and Water Contact Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	10271
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	19144
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	10250
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	10251
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	10252
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]

Temporal Representation: Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID: 19163

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 5

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]

Temporal Representation: Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID: 10248

Pollutant: pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	10249
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	19681
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	267
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 13 of 267 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	10270
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	10269

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	10288
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	10272
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted

	in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	19145
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	19146
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	19147
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 2 monitoring sites [304-ZAYAN-21 - Zayante Creek, 304-ZAYAN-22 - Zayante Creek at Quail Hollow Rd. Bridge]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	19677
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	267
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 7 of 267 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	19678
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	267
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 7 of 267 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	19680
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	267
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 13 of 267 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36250, pH **Region 3**

Zayante Creek

LOE ID:	19679
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	267
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Zayante Creek to determine beneficial use support and results are as follows: 13 of 267 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 3 monitoring sites [304ZAC_SCC - ZAYANTE CR. BELOW LOMPICO CR., 304ZAS_SCC - ZAYANTE CR. at

	SLR, 304ZAZ_SCC - ZAYANTE CR. at ZAYANTE]
Temporal Representation:	Data was collected over the time period 5/15/1990-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	36900	Region 3
Zayante Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. No new data were assessed. The sample size for the evaluation guideline for non-contact recreation for fecal coliform is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using Table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Seven of 15 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 15 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of 15 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36900, Fecal Coliform	**Region 3**
Zayante Creek	

LOE ID:	10230
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36900, Fecal Coliform **Region 3**

Zayante Creek

LOE ID:	10229
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Zayante Creek to determine beneficial use support and results are as follows: 7 of 15 samples

	exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Zayante Creek was collected at 1 monitoring site [304ZAY-Zayante Creek at Graham Hill Road]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Manson Creek**
Water Body ID: **CAR3041202220020117155258**
Water Body Type: **River & Stream**

DECISION ID **41232** **Region 3**
Manson Creek

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The pollutant name was changed from Â‘Nitrogen, ammonia (Total Ammonia)' to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision has not otherwise changed from the 2010 assessment cycle.

One line of evidence is available in the administrative record to assess this pollutant. Neither of the 2 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 2 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41232, Ammonia **Region 3**
Manson Creek

LOE ID: 19745

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 2 monitoring sites [304MBT_SCC - MANSON CR BELOW TLC, 304MWI_SCC - MANSON CR at WILLOWBROOK]
Temporal Representation:	Data was collected over the time period 6/12/1998-7/25/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41543**	**Region 3**
Manson Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 123 samples exceed the Municipal and Domestic Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 123 samples exceed the Municipal and Domestic Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41543, Nitrate **Region 3**

Manson Creek

LOE ID:	18701
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	123
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 0 of 123 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 4 monitoring sites [304MAS_SCC - MANSON CR. at SLR, 304MBT_SCC - MANSON CR BELOW TLC, 304MTL_SCC - MANSON CR ABOVE TLC, 304MWI_SCC - MANSON CR at WILLOWBROOK]
Temporal Representation:	Data was collected over the time period 3/4/1992-2/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	41542	Region 3
Manson Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seven of the 267 samples exceed the Cold Freshwater Habitat water quality objective. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats and the dissolved oxygen data indicates that use is fully supported. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seven of the 267 samples exceed the Cold Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41542, Oxygen, Dissolved	**Region 3**
Manson Creek	

LOE ID:	19831
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 1 monitoring site [304MAS_SCC - MANSON CR. at SLR]
Temporal Representation:	Data was collected over the time period 4/20/1998-5/12/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41542, Oxygen, Dissolved **Region 3**

Manson Creek

LOE ID:	19853
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	267
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 7 of 267 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 4 monitoring sites [304MAS_SCC - MANSON CR. at SLR, 304MBT_SCC - MANSON CR BELOW TLC, 304MTL_SCC - MANSON CR ABOVE TLC, 304MWI_SCC - MANSON CR at WILLOWBROOK]
Temporal Representation:	Data was collected over the time period 3/4/1992-7/31/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41593 — Region 3

Manson Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 129 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 129 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41593, Temperature, water — Region 3

Manson Creek

LOE ID:	19935
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	129
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 0 of 129 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 4 monitoring sites [304MAS_SCC - MANSON CR. at SLR, 304MBT_SCC - MANSON CR BELOW TLC, 304MTL_SCC - MANSON CR ABOVE TLC, 304MWI_SCC - MANSON CR at WILLOWBROOK]
Temporal Representation:	Data was collected over the time period 3/4/1992-2/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **41487** **Region 3**

Manson Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Three of the 116 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life

beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 116 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41487, Turbidity **Region 3**

Manson Creek

LOE ID:	19685
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	116
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 3 of 116 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 4 monitoring sites [304MAS_SCC - MANSON CR. at SLR, 304MTL_SCC - MANSON CR ABOVE TLC, 304MWI_SCC - MANSON CR at WILLOWBROOK, 304MBT_SCC - MANSON CR BELOW TLC]
Temporal Representation:	Data was collected over the time period 3/4/1992-2/23/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41453 Region 3

Manson Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Nine of the 123 samples exceed the Cold Freshwater Habitat water quality objective and 1 of 123 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Nine of the 123 samples exceed the Cold Freshwater Habitat water quality objective and 1 of 123 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41453, pH Region 3

Manson Creek

LOE ID:	19841
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	123
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 1 of 123 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 4 monitoring sites [304MAS_SCC - MANSON CR. at SLR, 304MBT_SCC - MANSON CR BELOW TLC, 304MTL_SCC - MANSON CR ABOVE TLC, 304MWI_SCC - MANSON CR at WILLOWBROOK]
Temporal Representation:	Data was collected over the time period 3/4/1992-2/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41453, pH **Region 3**

Manson Creek

LOE ID:	19840
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	123
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 9 of 123 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 4 monitoring sites [304MAS_SCC - MANSON CR. at SLR, 304MBT_SCC - MANSON CR BELOW TLC, 304MTL_SCC - MANSON CR ABOVE TLC, 304MWI_SCC - MANSON CR at WILLOWBROOK]
Temporal Representation:	Data was collected over the time period 3/4/1992-2/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41453, pH **Region 3**

Manson Creek

LOE ID:	19857
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	123
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 1 of 123 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 4 monitoring sites [304MAS_SCC - MANSON CR. at SLR, 304MBT_SCC - MANSON CR BELOW TLC, 304MTL_SCC - MANSON CR ABOVE TLC, 304MWI_SCC - MANSON CR at WILLOWBROOK]
Temporal Representation:	Data was collected over the time period 3/4/1992-2/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41453, pH **Region 3**

Manson Creek

LOE ID:	19858
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	123
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Manson Creek to determine beneficial use support and results are as follows: 1 of 123 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Manson Creek was collected at 4 monitoring sites [304MAS_SCC - MANSON CR. at SLR, 304MBT_SCC - MANSON CR BELOW TLC, 304MTL_SCC - MANSON CR ABOVE TLC, 304MWI_SCC - MANSON CR at WILLOWBROOK]
Temporal Representation:	Data was collected over the time period 3/4/1992-2/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Gold Gulch Creek**
Water Body ID: **CAR3041202219990304103203**
Water Body Type: **River & Stream**

DECISION ID **39384** **Region 3**
Gold Gulch Creek

Pollutant: **Fecal Coliform**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 27 samples exceed the water quality objectives for Non-Contact and WaterContact Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 27 samples exceed the water quality objectives for Non-Contact and WaterContact Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39384, Fecal Coliform **Region 3**
Gold Gulch Creek

LOE ID: 18826

Pollutant: Fecal Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 27
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 1 monitoring site [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM]
Temporal Representation:	Data was collected over the time period 5/2/1990-9/16/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39384, Fecal Coliform **Region 3**

Gold Gulch Creek

LOE ID:	18825
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period

	exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 1 monitoring site [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM]
Temporal Representation:	Data was collected over the time period 5/2/1990-9/16/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **39341** **Region 3**

Gold Gulch Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 100 samples exceed the water quality objective for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 100 samples exceed the water quality objective for Municipal and Domestic Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39341, Nitrate **Region 3**

Gold Gulch Creek

LOE ID:	18700
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	100
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 0 of 100 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 2 monitoring sites [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM, 304GOS_SCC - GOLD GULCH at SLR, HWY 9]
Temporal Representation:	Data was collected over the time period 5/6/1991-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	39285	Region 3
Gold Gulch Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seventeen of the 66 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Thirty-five of the 338 samples are below 85% saturation, but the median of the data does not exceed (fall below) the Objective. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient

information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of the 66 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39285, Oxygen, Dissolved **Region 3**

Gold Gulch Creek

LOE ID:	19792
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	338
Number of Exceedances:	35
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 35 of 338 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 2 monitoring sites [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM, 304GOS_SCC - GOLD GULCH at SLR, HWY 9]
Temporal Representation:	Data was collected over the time period 5/2/1990-7/31/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39285, Oxygen, Dissolved **Region 3**

Gold Gulch Creek

LOE ID:	19855
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	66
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 17 of 66 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 2 monitoring sites [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM, 304GOS_SCC - GOLD GULCH at SLR, HWY 9]
Temporal Representation:	Data was collected over the time period 5/16/1994-6/2/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **39385** **Region 3**

Gold Gulch Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Seventeen of the 357 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventeen of the 357 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39385, Temperature, water **Region 3**

Gold Gulch Creek

LOE ID:	19860
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	357
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 17 of 357 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 2 monitoring sites [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM, 304GOS_SCC - GOLD GULCH at SLR, HWY 9]
Temporal Representation:	Data was collected over the time period 5/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 39357 — Region 3

Gold Gulch Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 317 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial usestive. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 317 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial usestive and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39357, Turbidity — Region 3

Gold Gulch Creek

LOE ID:	19644
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	317
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 1 of 317 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 2 monitoring sites [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM, 304GOS_SCC - GOLD GULCH at SLR, HWY 9]
Temporal Representation:	Data was collected over the time period 5/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**39597**	**Region 3**
Gold Gulch Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of 349 samples exceed the Cold Freshwater Habitat objective; 10 of 349 samples exceed the Municipal and Domestic Supply, Water Contact Recreation and Non-Contact Recreation objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-two of 349 samples exceed the Cold Freshwater Habitat objective; 10 of 349 samples exceed the Municipal and Domestic Supply, Water Contact Recreation and Non-Contact Recreation objectives. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39597, pH **Region 3**

Gold Gulch Creek

LOE ID:	18793
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	349
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 22 of 349 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 2 monitoring sites [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM, 304GOS_SCC - GOLD GULCH at SLR, HWY 9]
Temporal Representation:	Data was collected over the time period 5/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39597, pH **Region 3**

Gold Gulch Creek

LOE ID:	18794
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	349
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 10 of 349 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 2 monitoring sites [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM, 304GOS_SCC - GOLD GULCH at SLR, HWY 9]
Temporal Representation:	Data was collected over the time period 5/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39597, pH **Region 3**

Gold Gulch Creek

LOE ID:	19931
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	349
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 10 of 349 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-

	1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 2 monitoring sites [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM, 304GOS_SCC - GOLD GULCH at SLR, HWY 9]
Temporal Representation:	Data was collected over the time period 5/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39597, pH **Region 3**

Gold Gulch Creek

LOE ID:	19932
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	349
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Gold Gulch Creek to determine beneficial use support and results are as follows: 10 of 349 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Gold Gulch Creek was collected at 2 monitoring sites [304GOL_SCC - SOUTH FORK GOLD GULCH at DAM, 304GOS_SCC - GOLD GULCH at

	SLR, HWY 9]
Temporal Representation:	Data was collected over the time period 5/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Fall Creek**
Water Body ID: **CAR3041202219990225133326**
Water Body Type: **River & Stream**

DECISION ID **33971** **Region 3**
Fall Creek

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Erosion/Siltation | Habitat Modification | Nonpoint Source | Road Construction
TMDL Name:	San Lorenzo River Sediment
TMDL Project Code:	243
Date TMDL Approved by USEPA:	02/19/2004
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment-pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. Both of the samples more than 40 percent cover of deposited fine and sand sized sediment on the streambed. However, there are an insufficient number of samples to determine beneficial use support.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Both of the samples more than 40 percent cover of deposited fine and sand sized sediment on the streambed and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33971, Sedimentation/Siltation **Region 3**
Fall Creek

LOE ID:	95250
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Fall Creek. At two of the two stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. However, neither sample had less than 12 EPT taxa (EPT richness) present at these locations. Sediment percent cover measures 43 percent and 41 percent at the two stations.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	One monitoring location: Cowell SP (2008 and 2009).
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33971, Sedimentation/Siltation **Region 3**

Fall Creek

LOE ID:	3947
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 53291 Region 3

Fall Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 53291, Temperature, water Region 3

Fall Creek

LOE ID:	54132
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water temperature data submitted by the Lompico Watershed Conservancy from the summer months of 2005 showed that the maximum weekly maximum temperature (MWMT) never exceeded 16 degrees Celsius. The MWMT is an average for the year and therefore, for the purpose of this assessment is counted as a single sample and exceedance. These data were compiled by Donald Alley (fisheries biologist).
Data Reference:	Data for temperature in San Lorenzo Creek (Monterey County) and other water bodies, May 2005-Aug. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Per 'U.S. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards' (USEPA 2003), the U.S. EPA recommends a criterion for the protection of moderate to high density summertime salmon and trout juvenile rearing (i.e., core juvenile rearing) of a maximum weekly maximum temperature (MWMT) of 16 degrees C. The MWMT is also known as the maximum 7-day average of daily maximums (7DADM). The 16 degrees C MWMT criterion is recommended to (1) safely protect juvenile salmon and trout from lethal temperatures; (2) provide upper optimal conditions for juvenile growth under limited food during the period of summer maximum temperatures and optimal temperatures for other times of the growth season; (3) avoid temperatures where juvenile salmon and trout are at a competitive disadvantage with other fish; (4) protect against temperature induced elevated disease rates; and (5) provide temperatures that studies show juvenile salmon and trout prefer and are found in high densities. Both the CDFG and NOAA strongly support the use of the USEPA temperature guidance for the purposes of water quality assessment in California. These criteria have been adopted by both Oregon and Washington state and used for 303(d) Listing and TMDL development by the North Coast Region Water Quality Control Board. Its use in other geographic settings is appropriate as it has been recognized that salmonid stocks do not tend to vary much in their life history thermal needs, regardless of their geographic location. There is not enough significant genetic variation among stocks or among species of salmonids to warrant geographically specific water temperature standards.
Guideline Reference:	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. U.S. Environmental Protection Agency Region 10 Office of Water, Seattle, WA.
Spatial Representation:	Data collected at site 15: Below bridge for trail leading from Empire Grade parking lot.
Temporal Representation:	Data collected daily from 6/11/2005-10/12/2005.
Environmental Conditions:	
QAPP Information:	There was no QAPP submitted with this data, but detailed letters outlining QA/QC procedures were provided by the city of Santa Cruz and Donald Alley.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Shingle Mill Creek**
Water Body ID: **CAR3041202219980827102347**
Water Body Type: **River & Stream**

DECISION ID **34448** **Region 3**
Shingle Mill Creek

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status Revised
Sources: Channel Erosion | Erosion/Siltation | Highway/Road/Bridge Runoff | Road Construction
TMDL Name: San Lorenzo River Sediment
TMDL Project Code: 243
Date TMDL Approved by USEPA: 02/19/2004
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment/pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. The single sample did not have degraded biological community composition (EPT taxa richness less than 12) but did have more than 40 percent cover of deposited fine and sand sized sediment on the streambed.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did have more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34448, Sedimentation/Siltation **Region 3**
Shingle Mill Creek

LOE ID:	1842
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34448, Sedimentation/Siltation **Region 3**

Shingle Mill Creek

LOE ID:	95257
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Shingle Mill Creek. At one of the one stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. However this sample had 14 EPT taxa, slightly more than 12 EPT taxa which is the threshold indicating degraded biological diversity and community composition at these locations.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	One monitoring location: Above Hwy 9 (2008).
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

DECISION ID	37496	Region 3
Shingle Mill Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Agriculture | Collection System Failure | Natural Sources | Onsite Wastewater Systems (Septic Tanks) | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Nitrate
TMDL Project Code:	519
Date TMDL Approved by USEPA:	01/14/2003
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. The pollutant name was changed from the generic category of 'Nutrients' to 'Nitrate'.

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

A TMDL was approved by USEPA on January 14, 2003. The RWQCB is tracking the implementation of the TMDL through the Nitrate Management Plan being implemented by Santa Cruz County.

Three lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE (LOE #1841) is a placeholder that does not contain data or information. Staff are unable to reconstruct the original data used to place this water segment-pollutant combination on the section 303(d) list. A second LOE (#18640) contains all data evaluated for this assessment and compares that data to the Municipal and Domestic Supply Objective. None of the 110 samples exceed this objective (10 mg/L NO3 as N). The third LOE (#25223) assessed this same data, compared to the numeric target established by the TMDL. The numeric target meets the criteria of the Listing Policy (Section 6.1.3) as it is applicable to the beneficial use, protective of the beneficial use, linked to the pollutant under consideration, scientifically based and peer reviewed, well described and identified a range above which negative impacts will occur. Ninety-eight of 110 samples exceed the Evaluation Guideline (the numeric target from the TMDL, 2000).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ninety-eight of 110 samples exceed the Evaluation Guideline (the numeric target from the TMDL, 2000) and this exceeds the allowable frequency calculated from the equation in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37496, Nitrate **Region 3**

Shingle Mill Creek

LOE ID:	1841
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37496, Nitrate **Region 3**

Shingle Mill Creek

LOE ID:	18640
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	110
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Shingle Mill Creek to determine beneficial use support and results are as follows: 0 of 110 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Shingle Mill Creek was collected at 1 monitoring site [304SHM_SCC - SHINGLE MILL CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/19/1996-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37496, Nitrate **Region 3**

Shingle Mill Creek

LOE ID:	26448
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	103
Number of Exceedances:	98
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data collected by Santa Cruz County Environmental Health staff from the Shingle Mill Creek at confluence with San Lorenzo River are assessed relative to the numeric target for Nitrate, established by Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed. 98 of 103 samples exceed the numeric target.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin has the following narrative General Objective: Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin,

	that cause nuisance, or that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed (specifically including Shingle Mill Creek) established the following numeric target for Nitrate: 1.5 mg/L Nitrate as NO3 (or 0.33 mg/L Nitrate as N).
Guideline Reference:	San Lorenzo River Nitrate TMDL
Spatial Representation:	Data were collected by Santa Cruz County Environmental Health staff from the Shingle Mill Creek at confluence with San Lorenzo River (304SHM).
Temporal Representation:	Santa Cruz County Environmental Health staff conducted monitoring at Shingle Mill Creek at confluence with San Lorenzo River between January 1997 and August 2006.
Environmental Conditions:	
QAPP Information:	Santa Cruz County Environmental Health monitoring program QA.
QAPP Information Reference(s):	

DECISION ID 37357 Region 3

Shingle Mill Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 107 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 107 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37357, Oxygen, Dissolved Region 3

Shingle Mill Creek

LOE ID:	19910

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Shingle Mill Creek to determine beneficial use support and results are as follows: 1 of 17 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Shingle Mill Creek was collected at 1 monitoring site [304SHM_SCC - SHINGLE MILL CR. at SLR]
Temporal Representation:	Data was collected over the time period 12/13/1995-5/27/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37357, Oxygen, Dissolved **Region 3**

Shingle Mill Creek

LOE ID:	19835
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	107
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Shingle Mill Creek to determine beneficial use support and results are as follows: 1 of 107 samples exceed the criterion for Oxygen,

	Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Shingle Mill Creek was collected at 1 monitoring site [304SHM_SCC - SHINGLE MILL CR. at SLR]
Temporal Representation:	Data was collected over the time period 12/13/1995-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**37411**	**Region 3**
Shingle Mill Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 113 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 113 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37411, Temperature, water — Region 3

Shingle Mill Creek

LOE ID:	19917
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	113
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Shingle Mill Creek to determine beneficial use support and results are as follows: 0 of 113 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Shingle Mill Creek was collected at 1 monitoring site [304SHM_SCC - SHINGLE MILL CR. at SLR]
Temporal Representation:	Data was collected over the time period 12/13/1995-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 37533 — Region 3

Shingle Mill Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 97 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 97 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37533, Turbidity **Region 3**

Shingle Mill Creek

LOE ID:	19667
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	97
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Shingle Mill Creek to determine beneficial use support and results are as follows: 0 of 97 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Shingle Mill Creek was collected at 1 monitoring site [304SHM_SCC - SHINGLE MILL CR. at SLR]
Temporal Representation:	Data was collected over the time period 12/13/1995-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 37546 Region 3

Shingle Mill Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 112 samples exceed the Cold Freshwater Habitat water quality objective and 3 of 112 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 112 samples exceed the Cold Freshwater Habitat water quality objective and 3 of 112 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37546, pH Region 3

Shingle Mill Creek

LOE ID:	19781
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	112

Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Shingle Mill Creek to determine beneficial use support and results are as follows: 3 of 112 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Shingle Mill Creek was collected at 1 monitoring site [304SHM_SCC - SHINGLE MILL CR. at SLR]
Temporal Representation:	Data was collected over the time period 12/13/1995-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37546, pH **Region 3**

Shingle Mill Creek

LOE ID:	19779
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	112
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Shingle Mill Creek to determine beneficial use support and results are as follows: 1 of 112 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Shingle Mill Creek was collected at 1 monitoring site [304SHM_SCC - SHINGLE MILL CR. at SLR]
Temporal Representation:	Data was collected over the time period 12/13/1995-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37546, pH **Region 3**

Shingle Mill Creek

LOE ID:	19796
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	112
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Shingle Mill Creek to determine beneficial use support and results are as follows: 3 of 112 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Shingle Mill Creek was collected at 1 monitoring site [304SHM_SCC - SHINGLE MILL CR. at SLR]
Temporal Representation:	Data was collected over the time period 12/13/1995-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37546, pH **Region 3**

Shingle Mill Creek

LOE ID:	19780
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	112
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Shingle Mill Creek to determine beneficial use support and results are as follows: 3 of 112 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Shingle Mill Creek was collected at 1 monitoring site [304SHM_SCC - SHINGLE MILL CR. at SLR]
Temporal Representation:	Data was collected over the time period 12/13/1995-7/13/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Lorenzo River**
Water Body ID: **CAR3041202219980827084709**
Water Body Type: **River & Stream**

DECISION ID **44480** **Region 3**
San Lorenzo River

Pollutant: **Pathogens**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4 of the Listing Policy. This section of the Listing Policy calls for removing waters from the List if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence (LOE) is available in the administrative record to assess this pollutant but no data or information is associated with that LOE. The data cannot be found that was used in the initial assessment of this water segment-pollutant combination.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for this water segment-pollutant combination to be on the List. Furthermore, newer data for individual pollutants are available and will be assessed under individual decisions. Those decisions will replace this decision for the generic pollutant category 'Pathogens.'

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision for the general category of 'Pathogens' is being replaced by individual decisions for each of the fecal indicator bacteria for which there are data.

Line of Evidence (LOE) for Decision ID 44480, Pathogens **Region 3**
San Lorenzo River

LOE ID: 4005

Pollutant: Pathogens
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	38343	Region 3
San Lorenzo River		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Nonpoint Source | Onsite Wastewater Systems (Septic Tanks) | Other Urban Runoff | Urban Runoff/Storm Sewers | Wastewater
TMDL Name:	San Lorenzo River Nitrate
TMDL Project Code:	519
Date TMDL Approved by USEPA:	01/14/2003
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Nineteen lines of evidence are available in the administrative record to assess this pollutant. Zero of the 3383 nitrate samples exceed the water quality objectives for the Agricultural Supply and Municipal and Domestic Supply beneficial uses. One of the 41 nitrate samples exceeds the water quality objectives for Cold Freshwater Habitat. One of the 41 nitrate/nitrite samples exceeds the water quality objectives for Cold and Warm Freshwater Habitat. Zero of the 41 nitrate/nitrite samples exceed the water quality objectives for Municipal and Domestic Supply based on the Drinking Water MCL of 10 mg/L. However, 244 of 513 nitrate samples exceed the numeric target for Nitrate of 0.33 mg/L, established by Resolution Number 00-003, adopting the TMDL for nitrate in the San Lorenzo River Watershed.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two hundred and forty-four (244) of the 513 nitrate samples exceed the numeric target for Nitrate of 0.33 mg/L, established by Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed. This exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The San Lorenzo River Nitrate TMDL has been approved by USEPA.
5.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	18604
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3064
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 3064 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 12 monitoring sites [304SLT_SCC - SLR at BIG TREES, 304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLB_SCC - SLR BELOW BOULDER CR., 304SLA_SCC - SLR ABOVE LOVE CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLL_SCC - SLR at LOMOND ST. BRIDGE]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	18271
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River, 304-SANLO-26 - Garden of Eden]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	25283
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	498
Number of Exceedances:	237
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data collected by Santa Cruz County Environmental Health staff from the San Lorenzo

	River near Felton (San Lorenzo River at Big Trees (304SLT_SCC) are assessed relative to the numeric target for Nitrate, established by Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed. 327 of 498 samples exceed the numeric target.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin has the following narrative General Objective: Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed established the following numeric target for Nitrate: San Lorenzo River at Felton, 1.5 mg/L Nitrate as NO3 (or 0.33 mg/L Nitrate as N).
Guideline Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Spatial Representation:	Data were collected by Santa Cruz County Environmental Health staff from the San Lorenzo River near Felton (San Lorenzo River at Big Trees (304SLT_SCC).
Temporal Representation:	Santa Cruz County Environmental Health staff conducted monitoring at San Lorenzo River at Big Trees (304SLB) between January 1997 and August 2006.
Environmental Conditions:	
QAPP Information:	Santa Cruz County Environmental Health monitoring program QA.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	25284
Pollutant:	Nitrogen, Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data collected by CCAMP staff at San Lorenzo River at Big Trees (304SLB) are assessed relative to the numeric target for Nitrate, established by Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed. 244 of 513 samples exceed the numeric target.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin has the following narrative General Objective: Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Resolution number 00-003 adopting the TMDL for nitrate in the San Lorenzo River Watershed established the following numeric target for Nitrate: San Lorenzo River at Felton,

	1.5 mg/L Nitrate as NO3 (or 0.33 mg/L Nitrate as N).
Guideline Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Spatial Representation:	Data collected by CCAMP staff at one site, San Lorenzo River at Big Trees (304SLB).
Temporal Representation:	CCAMP staff conducted monthly monitoring at this site between January 2005 and March 2006
Environmental Conditions:	
QAPP Information:	CCAMP monitoring and data analysis is conducted following the SWAMP QAPP (Puckett et al., 2002).
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	18272
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River, 304-SANLO-26 - Garden of Eden]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	17724
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	113
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 113 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 11/13/2001-3/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	17725
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	113
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 113 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A

	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 11/13/2001-3/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	9200
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	9209
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	13935
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304SNL_CCL - San Lorenzo River at Laurel St.]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	13936
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental

	Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304SNL_CCL - San Lorenzo River at Laurel St.]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	9201
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	9208
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	18603
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3064
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 3064 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 12 monitoring sites [304SLT_SCC - SLR at BIG TREES, 304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLB_SCC - SLR BELOW BOULDER CR., 304SLA_SCC - SLR ABOVE LOVE CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLL_SCC - SLR at LOMOND ST. BRIDGE]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	51559
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate (NO3 as N) incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	51560
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for nitrate + nitrite (as N) that is incorporated by reference in the Basin Plan is 10.0 mg/L (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	51611
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	51610
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38343, Nitrate **Region 3**

San Lorenzo River

LOE ID:	51586
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrate as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**32395**	**Region 3**
San Lorenzo River		

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Construction/Land Development | Land Development | Silviculture | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Sediment
TMDL Project Code:	243
Date TMDL Approved by USEPA:	02/19/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to

2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment/pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. Two of the three samples have degraded biological community composition (EPT taxa richness less than 12) associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed. This supports the previous decision to add this water body segment/pollutant combination to the List.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 20 stations has more than 40 percent cover of deposited fine and sand sized sediment on the streambed. Five of the samples also have degraded biological community composition (EPT taxa richness less than 12). This supports the previous decision to add this water body segment/pollutant combination to the List.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 32395, Sedimentation/Siltation **Region 3**

San Lorenzo River

LOE ID:	95253
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	12
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from San Lorenzo River. At twelve of the twenty stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. In addition, less than 12 EPT taxa (EPT richness) were present at five of the twenty stations indicating degraded biological diversity and community composition at these locations. It is likely that degraded benthic invertebrate community condition is impacted by sediment deposition in this stream.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when

	deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	Ten monitoring locations: Campbell (2007), RR bridge (2007, 2008, 2009), city intake (2008, 2009), Brimblecom (2008, 2009), Castle Rock (2008, 2009), Paradise (2008, 2009), entrance bdg (2008, 2009), San Lo Way (2008, 2009), Hwy 9 X (2008, 2009), E Lomond bdg (2008, 2009),
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32395, Sedimentation/Siltation **Region 3**

San Lorenzo River

LOE ID:	1839
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID **39573** **Region 3**

San Lorenzo River

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Nine lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Three LOEs summarize unionized ammonia data in which zero of the 150 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Six LOEs summarize total ammonia data and zero of the 300 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the sample exceed the water quality objectives and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39573, Ammonia **Region 3**

San Lorenzo River

LOE ID:	51599
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 40 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39573, Ammonia **Region 3**

San Lorenzo River

LOE ID:	51549
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39573, Ammonia **Region 3**

San Lorenzo River

LOE ID:	9205
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39573, Ammonia **Region 3**

San Lorenzo River

LOE ID:	18788
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use

	support and results are as follows: 0 of 10 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304SLS_SCC - SLR at SYCAMORE GROVE, 304SLT_SCC - SLR at BIG TREES, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS]
Temporal Representation:	Data was collected over the time period 3/16/1990-10/29/2001.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39573, Ammonia **Region 3**

San Lorenzo River

LOE ID:	17817
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	113
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 113 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."

Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 11/13/2001-3/6/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39573, Ammonia **Region 3**

San Lorenzo River

LOE ID:	13951
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304SNL_CCL - San Lorenzo River at Laurel St.]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39573, Ammonia **Region 3**

San Lorenzo River

LOE ID:	9204
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39573, Ammonia **Region 3**

San Lorenzo River

LOE ID:	9213
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	54
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 54 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39573, Ammonia **Region 3**

San Lorenzo River

LOE ID:	9212
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38152 Region 3

San Lorenzo River

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Fourteen of the 150 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fourteen of the 150 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38152, Boron Region 3

San Lorenzo River

LOE ID:	9206
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	60
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 60 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38152, Boron **Region 3**

San Lorenzo River

LOE ID:	9214
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 5 of 49 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38152, Boron **Region 3**

San Lorenzo River

LOE ID:	51574
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 8 of 41 samples exceed the criterion for Boron, dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38463** **Region 3**

San Lorenzo River

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 157 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 157 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38463, Chlorophyll-a — Region 3

San Lorenzo River

LOE ID:	12025
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38463, Chlorophyll-a **Region 3**

San Lorenzo River

LOE ID:	9207
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	62
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 62 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38463, Chlorophyll-a **Region 3**

San Lorenzo River

LOE ID:	9203
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for

	secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38463, Chlorophyll-a **Region 3**

San Lorenzo River

LOE ID:	51609
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Chlorophyll a.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]

Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52211** **Region 3**

San Lorenzo River

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 41 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 41 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52211, Nitrogen, Nitrite **Region 3**

San Lorenzo River

LOE ID:	51596
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for Nitrite as N.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**37743**	**Region 3**
San Lorenzo River		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Two hundred eighty-three (283) of the 5,500 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two hundred eighty-three (283) of the 5,500 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	51613
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 3 of 41 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	51612
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	41
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 2 of 41 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	12027
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 2 of 60 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	18229
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-26 - Garden of Eden, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	19854
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1506
Number of Exceedances:	197
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 197 of 1506 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 12 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLB_SCC - SLR BELOW BOULDER CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS]
Temporal Representation:	Data was collected over the time period 6/25/1990-6/2/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	17842
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	98
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 22 of 98 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 2/13/2002-12/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	11988
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 11 of 56 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	11987
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 4 of 56 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	19791
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5219
Number of Exceedances:	252
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 252 of 5219 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 12 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLB_SCC - SLR BELOW BOULDER CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	12026
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	12007
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 5 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37743, Oxygen, Dissolved **Region 3**

San Lorenzo River

LOE ID:	12006
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 5 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38369** **Region 3**

San Lorenzo River

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Seven lines of evidence are available in the administrative record to assess this pollutant. A total of 674 of the 5609 samples exceed the water quality objective for agricultural uses. Note that all exceedances are in the lowest 1 mile of the River where there is tidal influence Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 674 of the 5609 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38369, Specific Conductivity **Region 3**

San Lorenzo River

LOE ID:	10358
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	10

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 10 of 56 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38369, Specific Conductivity **Region 3**

San Lorenzo River

LOE ID:	17888
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	36
Number of Exceedances:	36
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 36 of 36 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 8/24/2004-12/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38369, Specific Conductivity **Region 3**

San Lorenzo River

LOE ID:	10168
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38369, Specific Conductivity **Region 3**

San Lorenzo River

LOE ID:	10377
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 10 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 5 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38369, Specific Conductivity **Region 3**

San Lorenzo River

LOE ID:	18566
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	5325
Number of Exceedances:	604
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 604 of 5325 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 13 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLB_SCC - SLR BELOW BOULDER CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38369, Specific Conductivity **Region 3**

San Lorenzo River

LOE ID:	17526
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	68
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium

	(R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 4 of 68 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 12/4/2001-11/2/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38369, Specific Conductivity **Region 3**

San Lorenzo River

LOE ID:	17609
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-26 - Garden of Eden, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38369, Specific Conductivity **Region 3**

San Lorenzo River

LOE ID:	51585
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 18 of 41 samples exceed the criterion for Conductivity(Us).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3000 uS/cm in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38330** **Region 3**

San Lorenzo River

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Two hundred and eight (208) of the 5,016 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two hundred and eight (208) of the 5,016 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38330, Turbidity **Region 3**

San Lorenzo River

LOE ID:	18706
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [304-SANLO-26 - Garden of Eden, 304-SANLO-27 - Junction Park - San Lorenzo River]
Temporal Representation:	Data was collected over the time period 5/7/2005-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38330, Turbidity **Region 3**

San Lorenzo River

LOE ID:	11990
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 7 of 49 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38330, Turbidity **Region 3**

San Lorenzo River

LOE ID:	12044
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	33
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 5 of 33 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 2/16/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38330, Turbidity **Region 3**

San Lorenzo River

LOE ID:	12009
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38330, Turbidity **Region 3**

San Lorenzo River

LOE ID:	17523
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 10/19/2005-12/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38330, Turbidity **Region 3**

San Lorenzo River

LOE ID:	19936
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4878
Number of Exceedances:	189
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 189 of 4878 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 13 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLB_SCC - SLR BELOW BOULDER CR., 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304WGP_SCC - SLR at WATERMAN GAP, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS, 304SLR_SCC - SLR at RIVER ST., B.C.]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38330, Turbidity **Region 3**

San Lorenzo River

LOE ID:	51547
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 4 of 41 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37719** **Region 3**

San Lorenzo River

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Thirty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Three hundred thirty-six (336) of the 5833 samples exceed the water quality objective for Cold Freshwater Habitat, 207 of the 5833 samples exceed the water quality objective for Agricultural Supply, and 303 of the 5833 samples exceeded the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three-hundred-thirty-six of the 5833 samples exceed the water quality objective for Cold Freshwater Habitat, 207 of the 5833 samples exceed the water quality objective for Agricultural Supply, and 303 of the 5833 samples exceeded the water quality objectives for Drinking Water and Recreation. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10376
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	55
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 6 of 55 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10359
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	55
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 4 of 55 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10394
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 5 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10361
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	55
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 6 of 55 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10362
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 6 of 55 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10378
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 5 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10379

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 5 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10395
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 5 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10396
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 5 monitoring sites [

	304LOR-San Lorenzo Estuary at Laurel Street, 304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10360
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 55 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10185

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 3 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10186
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10187
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 5 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10188
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 5 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	10189
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 5 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19012
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and

	results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-26 - Garden of Eden, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19013
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 2 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-26 - Garden of Eden, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19014
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-26 - Garden of Eden, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19913
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	5556
Number of Exceedances:	189
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 189 of 5556 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 13 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLB_SCC - SLR BELOW BOULDER CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19914
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5556
Number of Exceedances:	316
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 316 of 5556 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 13 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLB_SCC - SLR BELOW BOULDER CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19929
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	5556
Number of Exceedances:	277
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 277 of 5556 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor

	raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 13 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLB_SCC - SLR BELOW BOULDER CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19930
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	5556
Number of Exceedances:	277
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 277 of 5556 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 13 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLB_SCC - SLR BELOW BOULDER CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLM_SCC - SLR at

	MT. CROSS BRIDGE, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19928
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	5556
Number of Exceedances:	277
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 277 of 5556 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 13 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLB_SCC - SLR BELOW BOULDER CR., 304WGP_SCC - SLR at WATERMAN GAP, 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19031
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-26 - Garden of Eden, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	19032
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-26 - Garden of Eden, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	17593
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	101
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 11 of 101 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 2/13/2002-12/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	17594
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	101
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 16 of 101 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 2/13/2002-12/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	17595
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	101
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 14 of 101 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 2/13/2002-12/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	17596
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	101
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 14 of 101 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 2/13/2002-12/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or

	fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	17611
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	101
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 14 of 101 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 2/13/2002-12/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	51576
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River

	to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	51546
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	51597
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Region Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	51561
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 6.5 or raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37719, pH **Region 3**

San Lorenzo River

LOE ID:	51564
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 41 samples exceed the criterion for pH.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38522** **Region 3**

San Lorenzo River

Pollutant:	**Chloride**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Hydromodification | Other
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Fifty-one of the 90 samples exceed the water quality objective for agricultural uses. However, all exceedances of this objective occurred at a single station (304LOR - San Lorenzo River at Laurel Street). This location is tidally influenced. A recent monitoring data summary (for the county of Santa Cruz) states the following: "During periods of macrotidal circulation with strong tidal influence (May through July 2008), water quality parameters (surface and bottom water temperature, salinity, and DO and bottom water pH and ORP) mimic the up and down patter of the tides." Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty-one of the 90 samples exceed the water quality objective for agricultural uses and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. However, all exceedances of this objective occurred at a single station which is tidally influenced.

Line of Evidence (LOE) for Decision ID 38522, Chloride **Region 3**

San Lorenzo River

LOE ID:	9215
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 23 of 49 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38522, Chloride **Region 3**

San Lorenzo River

LOE ID:	51584
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 28 of 41 samples exceed the criterion for Chloride.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**43044**	**Region 3**
San Lorenzo River		

Pollutant:	**Sodium**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Hydromodification | Other
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Fifty of the 90 samples exceed the water quality objective for agricultural uses. However, all exceedances of this objective occurred at a single station (304LOR - San Lorenzo River at Laurel Street). This location is tidally influenced and within the modified reach that was historically channelized. A recent monitoring data summary (for the county of Santa Cruz) states the following: "During periods of macrotidal circulation with strong tidal influence (May through July 2008), water quality parameters (surface and bottom water temperature, salinity, and DO and bottom water pH and ORP) mimic the up and down patter of the tides." Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty of the 90 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. However, all exceedances of this objective occurred at a single station which is tidally influenced.

Line of Evidence (LOE) for Decision ID 43044, Sodium **Region 3**

San Lorenzo River

LOE ID:	9202
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	49
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 23 of 49 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43044, Sodium **Region 3**

San Lorenzo River

LOE ID:	51598

Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	41
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 27 of 41 samples exceed the criterion for Sodium.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **38279** **Region 3**

San Lorenzo River

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Seven LOEs summarize 5861 grab samples and 310 of these samples exceeds the evaluation guideline (optimum range for steelhead should not exceed 21 degrees, Moyle, 1976). However, San Lorenzo River

provides habitat for Coho salmon and steelhead trout, which are listed as a threatened species under the federal Endangered Species Act. LOE 57810 summarizes continuous temperature measurements which are evaluated by calculating maximum weekly maximum temperature (MWMT). These measurements were collected throughout the summer rearing season (in most cases covering the months of June through September in 2005 and or 2006) at ten different monitoring stations. The MWMT does exceed the evaluation guideline for Coho Salmon applied to long term continuous temperature data (MWMT for Central Coast Coho, NOAA, 2012) used to interpret the narrative water quality objective. For reference, both the 16 degree MWMT and the 18 degree MWMT was exceeded at 14 of the 17 stations/seasons during the period of measurement. Eighteen degrees is the EPA temperature criterion for non-core salmon and trout. However, for this assessment, the 16 degree MWMT is used as it is more appropriate and protective for this water body.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Both the 16 degree MWMT and the 18 degree MWMT evaluation guidelines were exceeded at 14 of the 17 stations/seasons during the period of measurement.and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 38279, Temperature, water **Region 3**

San Lorenzo River

LOE ID:	51548
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	41
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 11 of 41 grab samples exceed the criterion for Water Temperature.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38279, Temperature, water **Region 3**

San Lorenzo River

LOE ID:	57810
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data collected by City of Santa Cruz and Donald Ally at 10 different locations on the San Lorenzo River during 2005 and 2006. Note that data was not collected both years at all 10 sites. In 14 out of 17 data sets (one continuous season of temperature data for a single location), the temperature exceeded the evaluation guideline (MWMT greater than16 degrees) for the summer rearing season at least one day during the period of record. Staff also evaluated the MWMT compared to the evaluation guideline for the protection of juvenile steelhead trout (MWMT greater than18degrees) and in14 of the 17 data sets the temperature also exceeded the 18 degree evaluation guideline.
Data Reference:	Data for temperature in San Lorenzo Creek (Monterey County) and other water bodies, May 2005-Aug. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Per the Central Coast Coho Salmon Recovery Plan, Vol III, pages 55-56 (NOAA, 2012) population level temperature rating of 16 degrees C (temperature expressed as maximum weekly maximum temperature or MWMT) are protective of juvenile coho during rearing season (summer). This threshold is protective of chronic exposure to elevated water temperatures which can result decline and absence of juvenile coho in habitats. This is also consistent with the 'U.S. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards' (USEPA 2003), in which the U.S. EPA recommends a criterion for the protection of moderate to high density summertime salmon and trout juvenile rearing (i.e., core juvenile rearing) of a maximum weekly maximum temperature (MWMT) of 16 degrees C. The MWMT is also known as the maximum 7-day average of daily maximums (7DADM). The 16 degrees C MWMT criterion is recommended to (1) safely protect juvenile salmon and trout from lethal temperatures; (2) provide upper optimal conditions for juvenile growth

	under limited food during the period of summer maximum temperatures and optimal temperatures for other times of the growth season; (3) avoid temperatures where juvenile salmon and trout are at a competitive disadvantage with other fish; (4) protect against temperature induced elevated disease rates; and (5) provide temperatures that studies show juvenile salmon and trout prefer and are found in high densities. Both the CDFG and NOAA support the use of the USEPA temperature guidance for the purposes of water quality assessment in California. These criteria have been adopted by both Oregon and Washington state and used for 303(d) Listing and TMDL development by the North Coast Region Water Quality Control Board.
Guideline Reference:	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. U.S. Environmental Protection Agency Region 10 Office of Water, Seattle, WA. NOAA - Final Recovery Plan for Central California Coast coho salmon (Oncorhynchus kisutch) Evolutionarily Significant Unit.
Spatial Representation:	Ten sites in the San Lorenzo River were monitored, San Lorenzo River-1 (Paradise Park), San Lorenzo River-(Rincon Reach- Henry Cowell Park below Gorge), San Lorenzo River-3 (Gorge- Henry Cowell Park below Eagle Creek), San Lorenzo River-4b (Upper Henry Cowell Park between Bridge and Gold Gulch), San Lorenzo River-6 (Felton below Fall Creek confluence), San Lorenzo River-7 (Ben Lomond above Love Creek confluence), San Lorenzo River-8 (Brookdale between Clear Creek confluence and Larkspur Bridge)San Lorenzo River-10 (North end of Brimblecom Road, upstream of Two Bar confluence), San Lorenzo River-11 (just upstream of Teihl Road Bridge), San Lorenzo River-12b (Waterman Gap upstream of Highway 9 Bridge). All ten sites are located upstream of Highway 1 and the flood control channel.
Temporal Representation:	Samples were collected throughout the summer rearing season (in most cases covering the months of June through September) in 2005 and or 2006.
Environmental Conditions:	
QAPP Information:	There was no QAPP submitted with this data, but detailed letters outlining QA/QC procedures were provided by the City of Santa Cruz and Donald Alley.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38279, Temperature, water **Region 3**

San Lorenzo River

LOE ID:	11991
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 7 of 56 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters,

	Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38279, Temperature, water **Region 3**

San Lorenzo River

LOE ID:	19859
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5578
Number of Exceedances:	283
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 283 of 5578 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 13 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304SLA_SCC - SLR ABOVE LOVE CR., 304SLB_SCC - SLR BELOW BOULDER CR., 304WGP_SCC - SLR at

	WATERMAN GAP, 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLR_SCC - SLR at RIVER ST., B.C., 304SLP_SCC - SLR at PACIFIC AVE., BROOKDALE, 304SLF_SCC - SLR at FERN DR., S.L. WOODS]
Temporal Representation:	Data was collected over the time period 1/2/1990-8/7/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38279, Temperature, water **Region 3**

San Lorenzo River

LOE ID:	12024
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 5 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38279, Temperature, water **Region 3**

San Lorenzo River

LOE ID:	17400
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	100
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Lorenzo River to determine beneficial use support and results are as follows: 7 of 100 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 2 monitoring sites [SL-SOQ SL-BRO - San Lorenzo River at Broadway]
Temporal Representation:	Data was collected over the time period 2/13/2002-12/27/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38279, Temperature, water **Region 3**

San Lorenzo River

LOE ID:	18615
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Water Temperature.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-26 - Garden of Eden, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38279, Temperature, water **Region 3**

San Lorenzo River

LOE ID:	12043
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	60
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 2 of 60 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42647**	**Region 3**
San Lorenzo River		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	San Lorenzo/Zayante Chlorpyrifos TMDL
TMDL Project Code:	1060
Date TMDL Approved by USEPA:	11/25/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under 3.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Under 3.6, a minimum of two lines of evidence are needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of two water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Six of the samples collected will not be included in this sample count because the laboratoryÂ's method detection limit and reporting limits were greater than the evaluation guideline and the result was non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. One of two sediment samples (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses, however one of the samples method detection limit and reporting limits were greater than the evaluation guideline. The result was non-detect and will not be included in this decision. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two of the thirteen samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The San Lorenzo/Zayante Chlorpyrifos TMDL has been approved by the USEPA on November 25, 2016.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 42647, Chlorpyrifos **Region 3**

San Lorenzo River

LOE ID:	16281
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42647, Chlorpyrifos **Region 3**

San Lorenzo River

LOE ID:	16157
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304SL9-San Lorenzo River at Highway 9, 304SLB001 - San Lorenzo River at Big Trees, 304RIV-San Lorenzo River at Crossing Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42647, Chlorpyrifos **Region 3**

San Lorenzo River

LOE ID:	16036
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06 Final Data File used for assessment: SWAMP Sediment Chemistry Data from Region 3 Harbors, 2004
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **50543** **Region 3**

San Lorenzo River

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Watershed Pathogen TMDL (including San Lorenzo River, Lompico Creek, Carbonera Creek and the San Lorenzo River Estuary)
TMDL Project Code:	726
Date TMDL Approved by USEPA:	07/20/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This is a new/revised decision to replace the decisions made for the generic pollutant category of 'Pathogen'. This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One-hundred-sixty of 597 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 11 of 597 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One-hundred-sixty of 597 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The San Lorenzo River Watershed Pathogen TMDL has been approved by USEPA on 07/20/2011. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50543, Fecal Coliform **Region 3**

San Lorenzo River

LOE ID:	10342
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	57

Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 3 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50543, Fecal Coliform **Region 3**

San Lorenzo River

LOE ID:	10414
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	19
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 19 of 60 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50543, Fecal Coliform **Region 3**

San Lorenzo River

LOE ID:	10415
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50543, Fecal Coliform **Region 3**

San Lorenzo River

LOE ID:	18789
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	439
Number of Exceedances:	97
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 97 of 439 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 9 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304WGP_SCC - SLR at WATERMAN GAP, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLB_SCC - SLR BELOW BOULDER CR., 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE]
Temporal Representation:	Data was collected over the time period 1/2/1990-12/23/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50543, Fecal Coliform **Region 3**

San Lorenzo River

LOE ID:	18790

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	439
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 3 of 439 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 9 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLT_SCC - SLR at BIG TREES, 304WGP_SCC - SLR at WATERMAN GAP, 304SLS_SCC - SLR at SYCAMORE GROVE, 304SLM_SCC - SLR at MT. CROSS BRIDGE, 304SLH_SCC - SLR at HIGHLANDS PARK, 304SLB_SCC - SLR BELOW BOULDER CR., 304SLL_SCC - SLR at LOMOND ST. BRIDGE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE]
Temporal Representation:	Data was collected over the time period 1/2/1990-12/23/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50543, Fecal Coliform **Region 3**

San Lorenzo River

LOE ID:	10341
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	57
Number of Exceedances:	28
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 28 of 57 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50543, Fecal Coliform **Region 3**

San Lorenzo River

LOE ID:	51575
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	41
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 5 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 50543, Fecal Coliform **Region 3**

San Lorenzo River

LOE ID:	51562
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	41
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 16 of 41 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42502	Region 3
San Lorenzo River		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42502, Anthracene	**Region 3**
San Lorenzo River	

LOE ID:	15818
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37816 Region 3

San Lorenzo River

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37816, Arsenic Region 3

San Lorenzo River

LOE ID:	15628

Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42512** **Region 3**

San Lorenzo River

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42512, Benzo(a)anthracene **Region 3**

San Lorenzo River

LOE ID:	15497
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42503	Region 3
San Lorenzo River		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42503, Benzo(a)pyrene (3,4-Benzopyrene -7-d)	**Region 3**
San Lorenzo River	

LOE ID:	15582
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37817** **Region 3**

San Lorenzo River

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37817, Cadmium **Region 3**

San Lorenzo River

LOE ID:	15443

Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38236**	**Region 3**
San Lorenzo River		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38236, Chromium **Region 3**

San Lorenzo River

LOE ID:	15901
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42506	Region 3
San Lorenzo River		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42506, Chrysene (C1-C4)	**Region 3**
San Lorenzo River	

LOE ID:	16103
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38319 Region 3

San Lorenzo River

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38319, Copper Region 3

San Lorenzo River

LOE ID:	16795

Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **43401** **Region 3**

San Lorenzo River

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the nine samples exceed the water quality objectives for DDT, DDE or DDD (USEPA, 40 CFR, May 2000). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the nine samples exceed the water quality objectives for DDT, DDE or DDD (USEPA, 40 CFR, May 2000) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43401, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

San Lorenzo River

LOE ID:	29947
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for 4,4'-DDT is 0.001 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-

day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.

QAPP Information: CCLEAN has an approved QAPP

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43401, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Lorenzo River

LOE ID: 29949

Pollutant: DDD (Dichlorodiphenyldichloroethane)

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 9

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff.

Data Reference: Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Human Health Criteria, for the consumption of water, set for 4,4'-DDD is 0.00083 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).

Objective/Criterion Reference: Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)

Temporal Representation: Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.

Environmental Conditions: Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.

QAPP Information: CCLEAN has an approved QAPP

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 43401, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Lorenzo River

LOE ID:	29950
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for 4,4'-DDE is 0.00059 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43401, DDT (Dichlorodiphenyltrichloroethane) Region 3

San Lorenzo River

LOE ID:	29948
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for 4,4'-DDT is 0.00057 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID	**42453**	**Region 3**
San Lorenzo River		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of eight water samples exceeded the aquatic life water quality objective. The two sediment samples (pore water) did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of eight water samples exceeded the aquatic life water quality objective. The two sediment samples (pore water) did not exceed the aquatic life water quality objective; however, these samples will not be included in the exceedance count because the criteria used are specific to water samples, not sediment pore water. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The sample sizes are insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed for application of Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42453, Diazinon **Region 3**

San Lorenzo River

LOE ID:	16662
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

of Fish and Game

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42453, Diazinon **Region 3**

San Lorenzo River

LOE ID:	16805
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304SL9-San Lorenzo River at Highway 9, 304SLB001 - San Lorenzo River at Big Trees, 304RIV-San Lorenzo River at Crossing Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42453, Diazinon **Region 3**

San Lorenzo River

LOE ID:	16704
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42515** **Region 3**

San Lorenzo River

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Three lines of evidence are available in the administrative record to assess this pollutant. The single sediment sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. In water samples, none of the nine samples exceeded the water quality objectives for aquatic life or for municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. None of the nine samples exceeded the water quality objectives for aquatic life or for municipal and Domestic Supply. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42515, Dieldrin **Region 3**

San Lorenzo River

LOE ID:	16494
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42515, Dieldrin **Region 3**

San Lorenzo River

LOE ID:	29945
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for Dieldrin is 0.056 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which

	nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42515, Dieldrin **Region 3**

San Lorenzo River

LOE ID:	29946
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for Dieldrin is 0.00014 ug/L(USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID	41883	Region 3
San Lorenzo River		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41883, Endrin	**Region 3**
San Lorenzo River	

LOE ID:	16577
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41923** **Region 3**

San Lorenzo River

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One lines of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41923, Fluoranthene **Region 3**

San Lorenzo River

LOE ID:	16410

Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41873** **Region 3**

San Lorenzo River

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41873, Fluorene **Region 3**

San Lorenzo River

LOE ID:	17291
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38304	Region 3
San Lorenzo River		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38304, Lead	**Region 3**
San Lorenzo River	

LOE ID:	17376
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **38316** **Region 3**

San Lorenzo River

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38316, Mercury **Region 3**

San Lorenzo River

LOE ID:	17190

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41874** **Region 3**

San Lorenzo River

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41874, Naphthalene **Region 3**

San Lorenzo River

LOE ID:	17013
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38197	Region 3
San Lorenzo River		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38197, Nickel	**Region 3**
San Lorenzo River	

LOE ID:	17094
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41925**	**Region 3**
San Lorenzo River		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41925, Phenanthrene	**Region 3**

San Lorenzo River

LOE ID:	16990
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41878** **Region 3**

San Lorenzo River

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

	One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41878, Pyrene **Region 3**

San Lorenzo River

LOE ID:	17880
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	39698	Region 3
San Lorenzo River		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. One LOE summarizes sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity). Zero of the two sediment samples resulted in a significant toxic effect to one or more test organisms. Two LOEs summarize water samples. Eight water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity). Zero of the eight water samples resulted in a significant toxic effect to one or more test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the sediment samples, or water samples, resulted in a significant toxic effect to one or more test organisms. Therefore, this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39698, Toxicity	**Region 3**
San Lorenzo River	

LOE ID:	24266
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304SL9-San Lorenzo River at Highway 9, 304SLB001 - San Lorenzo River at Big Trees, 304RIV-San Lorenzo River at Crossing Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39698, Toxicity **Region 3**

San Lorenzo River

LOE ID:	24264
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39698, Toxicity **Region 3**

San Lorenzo River

LOE ID:	24267
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304SL9-San Lorenzo River at Highway 9, 304SLB001 - San Lorenzo River at Big Trees, 304RIV-San Lorenzo River at Crossing Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39698, Toxicity **Region 3**

San Lorenzo River

LOE ID:	24263
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms,

	analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 5/3/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39698, Toxicity **Region 3**

San Lorenzo River

LOE ID:	24260
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304LOR-San Lorenzo Estuary at Laurel Street, 304SL9-San Lorenzo River at Highway 9, 304SLB001 - San Lorenzo River at Big Trees, 304RIV-San Lorenzo River at Crossing Road]
Temporal Representation:	Data was collected over the time period 1/3/2006-5/30/2006. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38296 Region 3

San Lorenzo River

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38296, Zinc Region 3

San Lorenzo River

LOE ID:	17689
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**43179**	**Region 3**
San Lorenzo River		

Pollutant:	**Chlordane**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Two of nine samples exceed the Human Health Criteria (USEPA, 40 CFR, May 2000) and this exceeds the allowable frequency in table 3.1 of the Listing Policy. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Two of nine samples exceed the Human Health Criteria (USEPA, 40 CFR, May 2000) and this exceeds the allowable frequency in table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43179, Chlordane **Region 3**

San Lorenzo River

LOE ID:	29891
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for Chlordane is 0.0043 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure

	maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43179, Chlordane **Region 3**

San Lorenzo River

LOE ID:	29892
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Two of the nine samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for Chlordane is 0.00057 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

DECISION ID	50544	Region 3
San Lorenzo River		

Pollutant:	**Enterococcus**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This is a new/revised decision to replace the decisions made for the generic pollutant category of 'Pathogen'. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Eleven of 39 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 39 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of 39 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50544, Enterococcus	**Region 3**
San Lorenzo River	

LOE ID:	14154
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	11
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for San Lorenzo River to determine beneficial

	use support and results are as follows:11 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304SNL_CCL - San Lorenzo River at Laurel St.].
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50544, Enterococcus **Region 3**

San Lorenzo River

LOE ID:	14170
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304SNL_CCL - San Lorenzo River at Laurel St.]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID	50542	Region 3
San Lorenzo River		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This is a new/revised decision to replace the decisions made for the generic pollutant category of 'Pathogen'. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eleven lines of evidence are available in the administrative record to assess this pollutant. Seventy-four of 190 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 2 of 150 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-four of 190 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli)	**Region 3**
San Lorenzo River	

LOE ID:	14031
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304SNL_CCL - San Lorenzo River at Laurel St.]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) Region 3

San Lorenzo River

LOE ID:	10169
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 13 of 60 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]

Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) **Region 3**

San Lorenzo River

LOE ID:	14030
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	20
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for San Lorenzo River to determine beneficial use support and results are as follows: 20 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304SNL_CCL - San Lorenzo River at Laurel St.]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) **Region 3**

San Lorenzo River

LOE ID:	10398
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	26

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 26 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) **Region 3**

San Lorenzo River

LOE ID:	10397
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	26
Number of Exceedances:	13
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for San Lorenzo River to determine beneficial use support and results are as follows: 13 of 26 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR-San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/20/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) Region 3

San Lorenzo River

LOE ID:	10170
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304RIV-San Lorenzo River at Crossing Road, 304SL9-San Lorenzo River at Highway 9, 304SLB-San Lorenzo River at Big Trees, 304SLE-San Lorenzo above Bear Creek]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) Region 3

San Lorenzo River

LOE ID:	19825
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 3 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304WGP_SCC - SLR at WATERMAN GAP]
Temporal Representation:	Data was collected over the time period 2/5/2001-2/28/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) Region 3

San Lorenzo River

LOE ID:	19824
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15

Number of Exceedances:	10
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Lorenzo River to determine beneficial use support and results are as follows: 10 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 3 monitoring sites [304SLZ_SCC - SLR RIVERMOUTH at TRESTLE, 304SLU_SCC - SLR at BROADWY/LAUREL ST BRIDGE, 304WGP_SCC - SLR at WATERMAN GAP]
Temporal Representation:	Data was collected over the time period 2/5/2001-2/28/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) **Region 3**

San Lorenzo River

LOE ID:	18460
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	10
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 2 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River, 304-SANLO-26 - Garden of Eden]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) **Region 3**

San Lorenzo River

LOE ID:	18461
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Lorenzo River to determine beneficial use support and results are as follows: 0 of 10 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 4 monitoring sites [304-SANLO-22 - San Lorenzo River Mouth, 304-SANLO-21 - San Lorenzo River Downtown, 304-SANLO-27 - Junction Park - San Lorenzo River, 304-SANLO-26 - Garden of Eden]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 50542, Escherichia coli (E. coli) **Region 3**

San Lorenzo River

LOE ID:	51563

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	40
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for San Lorenzo River to determine beneficial use support and results are as follows: 16 of 40 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Lorenzo River was collected at 1 monitoring site [304LOR -San Lorenzo Estuary at Laurel Street]
Temporal Representation:	Data was collected over the time period 1/16/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**43455**	**Region 3**
San Lorenzo River		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.1 of the Listing Policy. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.1 the site exceeded numeric objectives for toxic pollutants. Using the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.1. Three of the nine samples exceed the Human Health Criteria (USEPA, 40 CFR, May 2000) and this supports rejection of the null hypothesis.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the nine samples exceed the Human Health Criteria (USEPA, 40 CFR, May 2000) and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43455, PCBs (Polychlorinated biphenyls) **Region 3**

San Lorenzo River

LOE ID:	29951
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. Three of nine samples exceed the Human Health Criteria.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Human Health Criteria, for the consumption of water, set for PCB's is 0.00017 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000)).
Objective/Criterion Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the

	laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43455, PCBs (Polychlorinated biphenyls) Region 3

San Lorenzo River

LOE ID:	29952
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Preservation of Rare & Endangered Species | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Nine samples were analyzed by solid phase extraction after an approximately 30 day exposure, in-situ, to known volumes of water. Nine separate sample events were conducted by CCLEAN staff. None of the nine samples exceed the Criteria Continuous Concentration for PCB's.
Data Reference:	Final Data CCLEAN Mussel Tissue and Solid Phase Extraction data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentration which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life (Central Coast Water Quality Control Plan, general Objective, Section II.A.2.a).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The Criteria Continuous Concentration (CCC) or the the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects for PCB's is 14.0 ug/L (USEPA. Federal Register, 40 CFR Part 131 (Vol.65, No. 97. May 18, 2000.))
Guideline Reference:	Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule. 40 CFR Part 131. U.S. Environmental Protection Agency, Region IX, Water Division, San Francisco, CA
Spatial Representation:	Single sample location, San Lorenzo River, adjacent to USGS gauging station on west shore (Lat, N 36.9909, Long, W 122.0313)
Temporal Representation:	Nine separate (approximate 30 day) sample events. The first was initiated on October 3rd, 2002 and the ninth on September 8th 2006.
Environmental Conditions:	Water from the sample source (i.e., river) is pumped sequentially through a 0.45 micron glass-fiber particle filter, then through a column packed with XAD-2 resin beads, to which nonpolar compounds adsorb. Sampling rates are set to optimum volumes to ensure maximum extraction of target compounds from the sample water. Samples are pumped on a flow-proportioned basis to achieve the desired sample volumes over an approximately 30-day period. This requires predictions of total river discharges during the sampling period, which predictions are not always borne out, resulting in either longer sampling periods or higher or lower than the targeted sample volume. Higher sample volumes provide lower analytical detection limits. Both the particle filter and resin beads are extracted in the laboratory and the extracts are combined and analyzed to provide a total concentration of each compound in the extracted volume of water.
QAPP Information:	CCLEAN has an approved QAPP
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Love Creek**
Water Body ID: **CAR3041202119990304144104**
Water Body Type: **River & Stream**

DECISION ID **42127** **Region 3**
Love Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 30 samples exceed the water quality objective for Municipal and Domestic Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 30 samples exceed the water quality objective for Municipal and Domestic Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42127, Nitrate **Region 3**
Love Creek

LOE ID: 19921

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 30
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Love Creek to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Love Creek was collected at 1 monitoring site [304_LVC_SCC - LOVE CR at GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/19/1997-10/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**42190**	**Region 3**
Love Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess these pollutants. None of the 27 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality

requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 27 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42190, Oxygen, Dissolved **Region 3**

Love Creek

LOE ID:	19830
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Love Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Love Creek was collected at 1 monitoring site [304_LVC_SCC - LOVE CR at GLEN ARBOR]
Temporal Representation:	Data was collected on a single day 8/19/1997.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42190, Oxygen, Dissolved **Region 3**

Love Creek

LOE ID:	19725

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Love Creek to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Love Creek was collected at 1 monitoring site [304_LVC_SCC - LOVE CR at GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/19/1997-10/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**42128**	**Region 3**
Love Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 29 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 29 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42128, Temperature, water **Region 3**

Love Creek

LOE ID:	19572
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Love Creek to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Love Creek was collected at 1 monitoring site [304_LVC_SCC - LOVE CR at GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/19/1997-10/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	41566	Region 3
Love Creek		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One of the 3 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 3 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41566, Turbidity	**Region 3**
Love Creek	

LOE ID:	19385
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Love Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Love Creek was collected at 1 monitoring site [304_LVC_SCC - LOVE CR at GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 4/26/1999-10/29/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41519 **Region 3**

Love Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 29 samples exceed the water quality objectives for Neither of the samples exceed the water quality objectives for Agricultural Supply, Cold Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation or Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 29 samples exceed the water quality objectives for Neither of the samples exceed the water quality objectives for Agricultural Supply, Cold Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation or Water Contact Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41519, pH **Region 3**

Love Creek

LOE ID:	19888
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Love Creek to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Love Creek was collected at 1 monitoring site [304_LVC_SCC - LOVE CR at GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/19/1997-10/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41519, pH **Region 3**

Love Creek

LOE ID:	19889
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Love Creek to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Love Creek was collected at 1 monitoring site [304_LVC_SCC - LOVE CR at GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/19/1997-10/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41519, pH **Region 3**

Love Creek

LOE ID:	19890
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Love Creek to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Love Creek was collected at 1 monitoring site [304_LVC_SCC - LOVE CR at GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/19/1997-10/27/2005.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41519, pH **Region 3**

Love Creek

LOE ID:	19905
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	29
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Love Creek to determine beneficial use support and results are as follows: 0 of 29 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Love Creek was collected at 1 monitoring site [304_LVC_SCC - LOVE CR at GLEN ARBOR]
Temporal Representation:	Data was collected over the time period 8/19/1997-10/27/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **34514** **Region 3**

Love Creek

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34514, Sedimentation/Siltation **Region 3**

Love Creek

LOE ID:	3961
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Boulder Creek**
Water Body ID: **CAR3041202019990223102514**
Water Body Type: **River & Stream**

DECISION ID **34325** **Region 3**
Boulder Creek

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status Revised
Sources: Highway/Road/Bridge Runoff | Logging Road Construction/Maintenance
TMDL Name: San Lorenzo River Sediment
TMDL Project Code: 243
Date TMDL Approved by USEPA: 02/19/2004
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment-pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. None of the three samples have degraded biological community composition (EPT taxa richness less than 12) associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed. There are an insufficient number of samples to determine beneficial use support.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the three samples have degraded biological community composition (EPT taxa richness less than 12) nor do they have more than 40 percent cover of deposited fine and sand sized sediment on the streambed and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34325, Sedimentation/Siltation **Region 3**

Boulder Creek

LOE ID:	95247
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Boulder Creek. At zero of the three stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. In addition, none of the stations had less than 12 EPT taxa (EPT richness), the threshold for indicating degraded biological diversity and community composition at these locations.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% cover relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	Two monitoring locations: Hwy 236.4 (2008), Hwy 9 (2008, 2009)
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34325, Sedimentation/Siltation **Region 3**

Boulder Creek

LOE ID:	3932
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

	2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	**37956**	**Region 3**
Boulder Creek		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence (LOEs) are available in the administrative record to assess this pollutant. One LOE summarize unionized ammonia data in which zero of 14 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. One LOE summarizes total ammonia data and zero of the 15 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 11189) and total ammonia (Decision 11190). This decision contains all of the LOEs from those decisions in addition to new LOEs. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ (Decision 11189) to Â‘AmmoniaÂ’ in the 2014 assessment cycle. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 14 samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life and zero of the 15 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water. Neither of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are

available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 37956, Ammonia **Region 3**

Boulder Creek

LOE ID:	9191
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37956, Ammonia **Region 3**

Boulder Creek

LOE ID:	9190

Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38128	Region 3
Boulder Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Boulder Creek provides habitat for coho salmon and steelhead trout, which are listed as a threatened species under the federal Endangered Species Act. Five lines of evidence are available in the administrative record to assess this pollutant. LOEs 18839,

11892, 11911 and 19897 summarize 128 grab samples and 2 overnight diurnal monitoring events. None of the 128 grab samples and neither of the overnight diurnal samples exceeded the evaluation guideline (optimum range for steelhead, Moyle, 1976) used to interpret the narrative water quality objective. LOE 53597 summarizes two years of continuous temperature measurements which are evaluated by calculating maximum weekly maximum temperature (MWMT). Both of the two MWMTs exceed the evaluation guideline (MWMT for Central Coast Coho, NOAA, 2012) used to interpret the narrative water quality objective. The MWMT sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 128 grab samples and zero of the overnight diurnal samples exceed the optimal range for steelhead guideline. However, both of the MWMTs calculated from long term deployment of continuous temperature logger data exceeded the relevant evaluation guidelines used to interpret the narrative water quality objective. But these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38128, Temperature, water **Region 3**

Boulder Creek

LOE ID:	11892
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38128, Temperature, water **Region 3**

Boulder Creek

LOE ID:	19897
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	212
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 212 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 8/12/1991-6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to

protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38128, Temperature, water **Region 3**

Boulder Creek

LOE ID:	11911
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38128, Temperature, water **Region 3**

Boulder Creek

LOE ID:	18839
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38128, Temperature, water **Region 3**

Boulder Creek

LOE ID:	53597
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Two out of two samples exceed the evaluation guideline for temperature in this water body. Water temperature data submitted by the Lompico Watershed Conservancy from the summer months of 2005 and 2006 showed that the maximum weekly maximum temperature (MWMT) exceeded 16 degrees Celsius. The MWMT is calculated for the year calander and therefore, for the purpose of this assessmen, a year of data is counted as a single sample and exceedance. These data were compiled by Donald Alley (fisheries biologist).
Data Reference:	Data for temperature in San Lorenzo Creek (Monterey County) and other water bodies, May 2005-Aug. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Per the Central Coast Coho Salmon Recovery Plan, Vol III, pages 55-56 (NOAA, 2012) population level temperature rating of 16 degrees C (temperature expressed as maximum weekly maximum temperature or MWMT) are protective of juvenile coho during rearing season (summer). This threshold is protective of chronic exposure to elevated water temperatures which can result decline and absence of juvenile coho in habitats. This is also consistent with the 'U.S. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards' (USEPA 2003), in which the U.S. EPA recommends a criterion for the protection of moderate to high density summertime salmon and trout juvenile rearing (i.e., core juvenile rearing) of a maximum weekly maximum temperature (MWMT) of 16 degrees C. The MWMT is also known as the maximum 7-day average of daily maximums (7DADM). The 16 degrees C MWMT criterion is recommended to (1) safely protect juvenile salmon and trout from lethal temperatures; (2) provide upper optimal conditions for juvenile growth under limited food during the period of summer maximum temperatures and optimal temperatures for other times of the growth season; (3) avoid temperatures where juvenile salmon and trout are at a competitive disadvantage with other fish; (4) protect against temperature induced elevated disease rates; and (5) provide temperatures that studies show juvenile salmon and trout prefer and are found in high densities. Both the CDFG and NOAA strongly support the use of the USEPA temperature guidance for the purposes of water quality assessment in California. These criteria have been adopted by both Oregon and Washington state and used for 303(d) Listing and TMDL development by the North Coast Region Water Quality Control Board. Its use in other geographic settings is appropriate as it has been recognized that salmonid stocks do not tend to vary much in their life history thermal needs, regardless of their geographic location. There is not enough significant genetic variation among stocks or among species of salmonids to warrant geographically specific water temperature standards.
Guideline Reference:	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. U.S. Environmental Protection Agency Region 10 Office of Water, Seattle, WA.
Spatial Representation:	Data collected at site 17a: Above Highway 9 in town.
Temporal Representation:	Data collected daily from 6/11/2005-10/03/2006.
Environmental Conditions:	
QAPP Information:	There was no QAPP submitted with this data, but detailed letters outlining QA/QC procedures were provided by the city of Santa Cruz and Donald Alley.
QAPP Information Reference(s):	

DECISION ID **37935** **Region 3**

Boulder Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the water quality objective for Agricultural Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 15 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37935, Boron **Region 3**

Boulder Creek

LOE ID:	9192
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Boron, dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42900 Region 3

Boulder Creek

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 15 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 15 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42900, Chlorophyll-a Region 3

Boulder Creek

LOE ID:	9193
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**38017**	**Region 3**
Boulder Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 16 samples samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 16 samples

exceed the water quality objective for Non-Contact Recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 16 samples samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38017, Escherichia coli (E. coli) **Region 3**

Boulder Creek

LOE ID:	18462
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38017, Escherichia coli (E. coli) **Region 3**

Boulder Creek

LOE ID:	10477
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38017, Escherichia coli (E. coli) **Region 3**

Boulder Creek

LOE ID:	18447
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38017, Escherichia coli (E. coli) Region 3

Boulder Creek

LOE ID:	10478
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37130 Region 3

Boulder Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 18 samples exceed the water quality objective for Non-Contact Recreation. Two of the 18 exceed the water quality objective for Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 18 samples exceed the water quality objective for Non-Contact Recreation. Two of the 18 exceed the water quality objective for Water Contact Recreationand and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37130, Fecal Coliform Region 3

Boulder Creek

LOE ID:	10475
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37130, Fecal Coliform **Region 3**

Boulder Creek

LOE ID:	18841
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BLC_SCC - BOULDER CR. at SLR]
Temporal Representation:	Data was collected over the time period 8/12/1991-10/8/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37130, Fecal Coliform **Region 3**

Boulder Creek

LOE ID:	10462
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37130, Fecal Coliform **Region 3**

Boulder Creek

LOE ID:	18827
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BLC_SCC - BOULDER CR. at SLR]
Temporal Representation:	Data was collected over the time period 8/12/1991-10/8/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **38077** **Region 3**

Boulder Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 219 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 219 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38077, Nitrate **Region 3**

Boulder Creek

LOE ID:	18244
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38077, Nitrate **Region 3**

Boulder Creek

LOE ID:	18683
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	203
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 203 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 10/8/1991-6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38077, Nitrate **Region 3**

Boulder Creek

LOE ID:	18682
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	203
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 203 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 10/8/1991-6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38077, Nitrate **Region 3**

Boulder Creek

LOE ID:	18243
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38077, Nitrate **Region 3**

Boulder Creek

LOE ID:	9194
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided

	in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38077, Nitrate **Region 3**

Boulder Creek

LOE ID:	9195
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38090 Region 3
Boulder Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Twelve of the 225 samples exceed the water quality objective for Cold Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this waterbody is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twelve of the 225 samples exceed the water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the median value did not exceed the General Objective. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38090, Oxygen, Dissolved Region 3
Boulder Creek

LOE ID:	11894
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38090, Oxygen, Dissolved **Region 3**

Boulder Creek

LOE ID:	19815
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	207
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 11 of 207 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 8/12/1991-6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38090, Oxygen, Dissolved **Region 3**

Boulder Creek

LOE ID:	11890
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38090, Oxygen, Dissolved **Region 3**

Boulder Creek

LOE ID:	12170
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38090, Oxygen, Dissolved **Region 3**

Boulder Creek

LOE ID:	11910
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38090, Oxygen, Dissolved **Region 3**

Boulder Creek

LOE ID:	19891
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	40
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 3 of 40 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states

	the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 10/28/1993-4/22/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38090, Oxygen, Dissolved **Region 3**

Boulder Creek

LOE ID:	17964
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37969 **Region 3**

Boulder Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 207 samples exceed the water quality objective for Agricultural Supply. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. The pollutant name has been changed to specific conductivity for the 2014 assessment. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 207 samples exceed the water quality objective for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37969, Specific Conductivity — Region 3

Boulder Creek

LOE ID:	10476
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37969, Specific Conductivity **Region 3**

Boulder Creek

LOE ID:	10513
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37969, Specific Conductivity **Region 3**

Boulder Creek

LOE ID:	17444
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37969, Specific Conductivity **Region 3**

Boulder Creek

LOE ID:	18584
Pollutant:	Electrical Conductivity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	189
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 189 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 10/8/1991-2/9/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **42888** **Region 3**

Boulder Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Five of the 121 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life

beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 121 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42888, Turbidity **Region 3**

Boulder Creek

LOE ID:	19664
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	112
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 5 of 112 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 2 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE]
Temporal Representation:	Data was collected over the time period 8/12/1991-6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42888, Turbidity **Region 3**

Boulder Creek

LOE ID:	18743
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42888, Turbidity **Region 3**

Boulder Creek

LOE ID:	11893
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/10/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	38102	Region 3
Boulder Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twenty lines of evidence are available in the administrative record to assess this pollutant. Eight of 230 samples exceed the Agricultural Supply water quality objective, 23 of 230 samples exceed the Cold Freshwater Habitat water quality objective and 9 of 230 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Eight of 230 samples exceed the Agricultural Supply water quality objective, 23 of 230 samples exceed the Cold Freshwater Habitat water quality objective and 9 of 230 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	18829
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	18830

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	18831
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	18832
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	10526
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	10479
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder

	Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	10529
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	10528
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	10527

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	19737
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	213
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 23 of 213 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996

	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 8/12/1991-6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	19738
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	213
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 9 of 213 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 8/12/1991-6/22/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	19739
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	213
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 9 of 213 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 8/12/1991-6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	19740
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	213
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 9 of 213 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 8/12/1991-6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	10648
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 8/25/2005-8/26/2005. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	10511
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH — Region 3

Boulder Creek

LOE ID:	10512
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH — Region 3

Boulder Creek

LOE ID:	18828
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304-BOULD-21 - Boulder Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	19721
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	213
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Boulder Creek to determine beneficial use support and results are as follows: 8 of 213 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 3 monitoring sites [304BLC_SCC - BOULDER CR. at SLR, 304BCM_SCC - BOULDER CR. at MELISSA LANE, 304BCJ_SCC - BOULDER CR. at JAMISON CR.]
Temporal Representation:	Data was collected over the time period 8/12/1991-6/22/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	10510
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38102, pH **Region 3**

Boulder Creek

LOE ID:	10509
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Pajaro (Pajaro) data for Boulder Creek to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Boulder Creek was collected at 1 monitoring site [304BH9-Boulder Creek at Highway 9]
Temporal Representation:	Data was collected over the time period 1/20/2005-3/8/2006. Pajaro watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Two Bar Creek**
Water Body ID: **CAR3041201120020124152041**
Water Body Type: **River & Stream**

DECISION ID **38000** **Region 3**
Two Bar Creek

Pollutant: **Nitrate**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 101 samples exceed the Municipal and Domestic Supply water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 101 samples exceed the Municipal and Domestic Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38000, Nitrate **Region 3**
Two Bar Creek

LOE ID: 18681

Pollutant: Nitrate
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 101
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Two Bar Creek to determine beneficial use support and results are as follows: 0 of 101 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Two Bar Creek was collected at 1 monitoring site [304TBC_SCC - TWO BAR CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/28/1996-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**39454**	**Region 3**
Two Bar Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 107 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 107 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39454, Oxygen, Dissolved **Region 3**

Two Bar Creek

LOE ID:	19893
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	34
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Two Bar Creek to determine beneficial use support and results are as follows: 12 of 34 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Two Bar Creek was collected at 1 monitoring site [304TBC_SCC - TWO BAR CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/28/1996-4/27/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39454, Oxygen, Dissolved **Region 3**

Two Bar Creek

LOE ID:	19832
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	107
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Two Bar Creek to determine beneficial use support and results are as follows: 1 of 107 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Two Bar Creek was collected at 1 monitoring site [304TBC_SCC - TWO BAR CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/28/1996-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**37335**	**Region 3**
Two Bar Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 107 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 107 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37335, Temperature, water **Region 3**

Two Bar Creek

LOE ID:	19899
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	107
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Two Bar Creek to determine beneficial use support and results are as follows: 0 of 107 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Two Bar Creek was collected at 1 monitoring site [304TBC_SCC - TWO BAR CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/28/1996-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 37890 Region 3

Two Bar Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 92 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 92 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37890, Turbidity Region 3

Two Bar Creek

LOE ID:	19666
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Two Bar Creek to determine beneficial use

	support and results are as follows: 0 of 92 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Two Bar Creek was collected at 1 monitoring site [304TBC_SCC - TWO BAR CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/28/1996-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**38079**	**Region 3**
Two Bar Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of 108 samples exceed the Cold Freshwater Habitat water quality objective and 5 of 108 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of 108 samples exceed the Cold Freshwater Habitat water quality objective and 5 of 108 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38079, pH **Region 3**

Two Bar Creek

LOE ID:	19776
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	108
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Two Bar Creek to determine beneficial use support and results are as follows: 5 of 108 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Two Bar Creek was collected at 1 monitoring site [304TBC_SCC - TWO BAR CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/28/1996-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38079, pH **Region 3**

Two Bar Creek

LOE ID:	19777
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	108
Number of Exceedances:	5

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Two Bar Creek to determine beneficial use support and results are as follows: 5 of 108 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Two Bar Creek was collected at 1 monitoring site [304TBC_SCC - TWO BAR CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/28/1996-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38079, pH **Region 3**

Two Bar Creek

LOE ID:	19778
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	108
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Two Bar Creek to determine beneficial use support and results are as follows: 5 of 108 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Two Bar Creek was collected at 1 monitoring site [304TBC_SCC - TWO BAR CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/28/1996-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38079, pH **Region 3**

Two Bar Creek

LOE ID:	19761
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	108
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Two Bar Creek to determine beneficial use support and results are as follows: 2 of 108 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Two Bar Creek was collected at 1 monitoring site [304TBC_SCC - TWO BAR CR. at SLR]
Temporal Representation:	Data was collected over the time period 3/28/1996-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Kings Creek**
Water Body ID: **CAR3041201119990304115830**
Water Body Type: **River & Stream**

DECISION ID **34053** **Region 3**
Kings Creek

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Erosion/Siltation | Highway/Road/Bridge Construction | Logging Road Construction/Maintenance
TMDL Name:	San Lorenzo River Sediment
TMDL Project Code:	243
Date TMDL Approved by USEPA:	02/19/2004
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.9 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The initial decision to place this water body segment-pollutant combination on the 303(d) list was made prior to 2006 and associated data and documentation are not held in an assessment database. As a result, there are no data associated with the LOE that is a placeholder for the original decision to add this water body segment-pollutant combination to the List. However, recent physical habitat and benthic invertebrate community data have been collected and are summarized in one LOE. None of the three samples have degraded biological community composition (EPT taxa richness less than 12) associated with more than 40 percent cover of deposited fine and sand sized sediment on the streambed. However, there are an insufficient number of samples to determine beneficial use support.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the three samples have degraded biological community composition (EPT taxa richness less than 12) nor do they have more than 40 percent cover of deposited fine and sand sized sediment on the streambed and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 34053, Sedimentation/Siltation **Region 3**

Kings Creek

LOE ID:	95251
Pollutant:	Sediment
LOE Subgroup:	Population/Community Degradation
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	BIOLOGICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff evaluated sediment grain size and EPT taxa data that was collected following the SWAMP physical habitat and benthic invertebrate protocol from Kings Creek. At zero of the three stations, deposited fine and sand (FS) sediments on the stream bed were greater than 40%. all three stations had more than than 12 EPT taxa (EPT richness) the threshold indicating degraded biological diversity and community composition at these locations.
Data Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast Water Quality Control Plan (Basin Plan) general water quality objective. Waters shall not contain settable material in concentrations that result in deposition of material that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Loss of benthic invertebrate species diversity and altered community composition (based on the number of mayfly, stonefly and caddisfly taxa or EPT taxa richness) occurs when deposited fine and sand (FS) sediments on the stream bed exceeds 40% relative to Central Coast reference stream species composition and diversity (Herbst, D.B., et al, 2014 and Herbst, D.B., et al, 2011).
Guideline Reference:	Three papers summarizing numeric TMDL targets for benthic invertebrates and sediment indicators in the San Lorenzo River Watershed
Spatial Representation:	One monitoring location: County Land (2007, 2008, 2009).
Temporal Representation:	Samples were collected in the spring - early season of 2007, 2008 and 2009
Environmental Conditions:	None
QAPP Information:	SWAMP protocols were followed for sample collection. SWAMP QAPP was followed.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 34053, Sedimentation/Siltation **Region 3**

Kings Creek

LOE ID:	3951
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to

	2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 41381 Region 3

Kings Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess these pollutants. Three of the 128 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 128 samples exceed the dissolved oxygen water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the median value did not exceed the General Objective. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41381, Oxygen, Dissolved Region 3

Kings Creek

LOE ID:	19894
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-4/27/1998.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41381, Oxygen, Dissolved **Region 3**

Kings Creek

LOE ID:	18210
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304-SANLO-25 - King's Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41381, Oxygen, Dissolved **Region 3**

Kings Creek

LOE ID:	19833
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	127
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 3 of 127 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-8/2/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41198 Region 3
Kings Creek

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample does not exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. It also does not exceed the water quality objective for Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample does not exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. It also does not exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41198, Escherichia coli (E. coli) Region 3
Kings Creek

LOE ID:	18294
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304-SANLO-25 - King's Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41198, Escherichia coli (E. coli) Region 3

Kings Creek

LOE ID:	18293
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304-SANLO-25 - King's Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or

fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

DECISION ID	41724	Region 3
Kings Creek		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Neither sample exceeds the water quality objectives for Water Contact Recreation or Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither sample exceeds the water quality objectives for Water Contact Recreation or Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41724, Fecal Coliform	**Region 3**
Kings Creek	

LOE ID:	18809
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-2/21/1990.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41724, Fecal Coliform **Region 3**

Kings Creek

LOE ID:	18808
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-2/21/1990.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41640 Region 3
Kings Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 103 samples exceed the water quality objective for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 103 samples exceed the water quality objective for Municipal and Domestic Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41640, Nitrate Region 3
Kings Creek

LOE ID:	18432
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304-SANLO-25 - King's Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41640, Nitrate **Region 3**

Kings Creek

LOE ID:	18643
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	102
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 102 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/21/1990-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41694 — Region 3

Kings Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 128 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 128 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41694, Temperature, water — Region 3

Kings Creek

LOE ID:	18595
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304-SANLO-25 - King's Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41694, Temperature, water **Region 3**

Kings Creek

LOE ID:	19918
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	127
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 127 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan,

	Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 41800 **Region 3**
Kings Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 118 samples exceed the water quality objective Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 118 samples exceed the water quality objective Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41800, Turbidity **Region 3**
Kings Creek

LOE ID:	19682
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	118
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 118 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41211**	**Region 3**
Kings Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Three of 131 samples exceed the Cold Freshwater Habitat water quality objective and 8 of 131 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of 131 samples exceed the Cold Freshwater Habitat water quality objective and 8 of 131 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41211, pH **Region 3**

Kings Creek

LOE ID:	19800
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	130
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 8 of 130 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41211, pH — Region 3

Kings Creek

LOE ID:	18968
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304-SANLO-25 - King's Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41211, pH — Region 3

Kings Creek

LOE ID:	18969
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Kings Creek to determine beneficial use support and results

	are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304-SANLO-25 - King's Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41211, pH **Region 3**

Kings Creek

LOE ID:	19798
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	130
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 8 of 130 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to

	protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41211, pH **Region 3**

Kings Creek

LOE ID:	18971
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304-SANLO-25 - King's Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41211, pH **Region 3**

Kings Creek

LOE ID:	19799
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	130
Number of Exceedances:	8

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 8 of 130 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41211, pH **Region 3**

Kings Creek

LOE ID:	19797
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	130
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Kings Creek to determine beneficial use support and results are as follows: 3 of 130 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304KGC_SCC - KINGS CR. at HWY 9]
Temporal Representation:	Data was collected over the time period 2/20/1990-8/2/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41211, pH **Region 3**

Kings Creek

LOE ID:	18970
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Kings Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Kings Creek was collected at 1 monitoring site [304-SANLO-25 - King's Creek]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Wilder Creek**
Water Body ID: **CAR3041103120020124154135**
Water Body Type: **River & Stream**

DECISION ID **37482** **Region 3**
Wilder Creek

Pollutant: **Specific Conductivity**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

The pollutant name has been changed.

One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Agricultural Supply water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 8 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37482, Specific Conductivity **Region 3**
Wilder Creek

LOE ID: 17408

Pollutant: Electrical Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37529**	**Region 3**
Wilder Creek		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 6 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use but none of the samples exceed the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 6 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use but none of the samples exceed the water quality objective for Non-Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37529, Escherichia coli (E. coli) **Region 3**

Wilder Creek

LOE ID:	18280
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37529, Escherichia coli (E. coli) **Region 3**

Wilder Creek

LOE ID:	18281
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**37555**	**Region 3**
Wilder Creek		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objectives for Municipal and Domestic Supply or for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objectives for Municipal and Domestic Supply or for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37555, Nitrate **Region 3**

Wilder Creek

LOE ID:	18380
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37555, Nitrate **Region 3**

Wilder Creek

LOE ID:	18379
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38062** **Region 3**

Wilder Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 8 samples exceeded the water quality objectives for dissolved oxygen in both Cold and Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 8 samples exceeded the water quality objectives and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38062, Oxygen, Dissolved **Region 3**

Wilder Creek

LOE ID:	18160
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38062, Oxygen, Dissolved **Region 3**

Wilder Creek

LOE ID:	18175
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **38063** **Region 3**

Wilder Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 8 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 8 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38063, Temperature, water **Region 3**

Wilder Creek

LOE ID:	18749
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37984 Region 3

Wilder Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 8 samples exceed any of the water quality objectives. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 8 samples exceed any of the water quality objectives and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37984, pH Region 3

Wilder Creek

LOE ID:	19046
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37984, pH **Region 3**

Wilder Creek

LOE ID:	19024
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]

Temporal Representation: Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37984, pH **Region 3**

Wilder Creek

LOE ID: 19042

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Cold Freshwater Habitat

Aquatic Life Use: Cold Freshwater Habitat

Number of Samples: 8

Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]

Temporal Representation: Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37984, pH **Region 3**

Wilder Creek

LOE ID: 19044

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37984, pH **Region 3**

Wilder Creek

LOE ID:	19043
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37984, pH **Region 3**

Wilder Creek

LOE ID:	19045
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Wilder Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Wilder Creek was collected at 2 monitoring sites [304-WILDE-21 - Wilder Creek, 304-WILDE-22 - Wilder Creek Above the marsh-at Mouth]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Majors Creek (Santa Cruz County)**
Water Body ID: **CAR3041103120020108154318**
Water Body Type: **River & Stream**

DECISION ID **43088** **Region 3**
Majors Creek (Santa Cruz County)

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Evaluation Guideline for E. coli (USEPA Ambient Water Quality Criteria for Bacteria -1986).

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceed the Evaluation Guideline for E. coli (USEPA Ambient Water Quality Criteria for Bacteria -1986) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43088, Escherichia coli (E. coli) **Region 3**
Majors Creek (Santa Cruz County)

LOE ID: 29751

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3
Number of Exceedances: 2

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [304-MAJOR-21 - Majors Creek At Scaroni R]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43088, Escherichia coli (E. coli) Region 3

Majors Creek (Santa Cruz County)

LOE ID:	29749
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring sites [304-MAJOR-21 - Majors Creek At Scaroni R]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 43423 Region 3

Majors Creek (Santa Cruz County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. A single line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objective for Nitrate. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the water quality objective for Nitrate and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43423, Nitrate Region 3

Majors Creek (Santa Cruz County)

LOE ID:	29746
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [304-MAJOR-21 - Majors Creek At Scaroni R]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 43435 Region 3

Majors Creek (Santa Cruz County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 5 samples exceed the Cold Freshwater Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the Cold Freshwater Habitat water quality objective and this does not

exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43435, Oxygen, Dissolved **Region 3**

Majors Creek (Santa Cruz County)

LOE ID:	29743
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring sites [304-MAJOR-21 - Majors Creek At Scaroni R]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/06. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 43473 **Region 3**

Majors Creek (Santa Cruz County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. A single line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43473, Temperature, water **Region 3**

Majors Creek (Santa Cruz County)

LOE ID:	29744
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [304-MAJOR-21 - Majors Creek At Scaroni R].
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005 Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 43474 Region 3

Majors Creek (Santa Cruz County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed any of the water quality objectives for pH. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed any of the water quality objectives for pH and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 43474, pH Region 3

Majors Creek (Santa Cruz County)

LOE ID:	29748
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [304-MAJOR-21 - Majors Creek At Scaroni R]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43474, pH **Region 3**

Majors Creek (Santa Cruz County)

LOE ID:	29745
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [304-MAJOR-21 - Majors Creek At Scaroni R].
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43474, pH **Region 3**

Majors Creek (Santa Cruz County)

LOE ID:	29752
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [304-MAJOR-21 - Majors Creek At Scaroni R]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43474, pH **Region 3**

Majors Creek (Santa Cruz County)

LOE ID:	29750
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Majors Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Majors Creek was collected at 1 monitoring site [304-MAJOR-21 - Majors Creek At Scaroni R]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Liddell Creek**
Water Body ID: **CAR3041103019990304122159**
Water Body Type: **River & Stream**

DECISION ID **41653** **Region 3**
Liddell Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two line of evidence is available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 3 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41653, Escherichia coli (E. coli) **Region 3**
Liddell Creek

LOE ID: 18365

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41653, Escherichia coli (E. coli) **Region 3**

Liddell Creek

LOE ID:	18364
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41347 **Region 3**

Liddell Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 9 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 9 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41347, Nitrate **Region 3**

Liddell Creek

LOE ID:	18327
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41347, Nitrate **Region 3**

Liddell Creek

LOE ID:	18360
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41347, Nitrate **Region 3**

Liddell Creek

LOE ID:	19688
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected over the time period 2/25/1998-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41347, Nitrate **Region 3**

Liddell Creek

LOE ID:	19689
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected over the time period 2/25/1998-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41335**	**Region 3**
Liddell Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the four samples exceed the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the four samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41335, Oxygen, Dissolved **Region 3**

Liddell Creek

LOE ID:	18159
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41335, Oxygen, Dissolved **Region 3**

Liddell Creek

LOE ID:	19789
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID **39477** **Region 3**

Liddell Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 5 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 5 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39477, Specific Conductivity **Region 3**

Liddell Creek

LOE ID:	17390
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for

	all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39477, Specific Conductivity **Region 3**

Liddell Creek

LOE ID:	19803
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

DECISION ID	41376	Region 3
Liddell Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 5 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41376, Temperature, water	**Region 3**
Liddell Creek	

LOE ID:	19629
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-

	1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41376, Temperature, water **Region 3**

Liddell Creek

LOE ID:	18748
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41175 Region 3
Liddell Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the valuation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the valuation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41175, Turbidity Region 3
Liddell Creek

LOE ID:	19413
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

Data Reference:	Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Turbidity(NTU). Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**41176**	**Region 3**
Liddell Creek		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. None of the 5 samples exceed the Agricultural Supply water quality objective, 1 of the 5 samples exceed the Cold Freshwater Habitat water quality objective and none of the 5 samples exceed the objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 5 samples exceed the Agricultural Supply water quality objective, 1 of the 5 samples exceed the Cold Freshwater Habitat water quality objective and none of the 5 samples exceed the objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41176, pH **Region 3**

Liddell Creek

LOE ID:	19743
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41176, pH **Region 3**

Liddell Creek

LOE ID:	19742
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41176, pH **Region 3**

Liddell Creek

LOE ID:	19437
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41176, pH **Region 3**

Liddell Creek

LOE ID:	19436
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41176, pH — Region 3

Liddell Creek

LOE ID:	19438
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304LID_SCC - LIDDELL C at MOUTH]
Temporal Representation:	Data was collected on a single day 10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41176, pH — Region 3

Liddell Creek

LOE ID:	19022
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41176, pH **Region 3**

Liddell Creek

LOE ID:	19021
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41176, pH **Region 3**

Liddell Creek

LOE ID:	19020
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41176, pH **Region 3**

Liddell Creek

LOE ID:	19003
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41176, pH **Region 3**

Liddell Creek

LOE ID:	19023
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Liddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Liddell Creek was collected at 1 monitoring site [304-LIDEL-21 - Lidell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Laguna Creek (Santa Cruz County)**
Water Body ID: **CAR3041103019990304120803**
Water Body Type: **River & Stream**

DECISION ID **41314** **Region 3**
Laguna Creek (Santa Cruz County)

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 20 samples exceed the evaluation guideline (EPA's Lifetime Health advisory level for total ammonia in drinking water).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 20 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41314, Ammonia **Region 3**
Laguna Creek (Santa Cruz County)

LOE ID: 13969

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 20
Number of Exceedances: 0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304LAG_CCL - Laguna Creek at Mouth]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID 41327 Region 3

Laguna Creek (Santa Cruz County)

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 39 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 39 samples exceed the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of the 39 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 39 samples exceed the water quality objective for Non-Contact Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41327, Enterococcus **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	14193
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304LAG_CCL - Laguna Creek at Mouth].
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41327, Enterococcus **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	14194
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Laguna Creek(304) to determine beneficial

	use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304LAG_CCL - Laguna Creek at Mouth]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID 41200 Region 3

Laguna Creek (Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Six of the 42 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 42 samples exceed the water quality objective for Non-Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 42 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 42 samples exceed the water quality objective for Non-Contact Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41200, Escherichia coli (E. coli) **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	18371
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41200, Escherichia coli (E. coli) **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	18372
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41200, Escherichia coli (E. coli) Region 3

Laguna Creek (Santa Cruz County)

LOE ID:	14052
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 6 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304LAG_CCL - Laguna Creek at Mouth]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41200, Escherichia coli (E. coli) **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	14156
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304LAG_CCL - Laguna Creek at Mouth]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID 41707 **Region 3**

Laguna Creek (Santa Cruz County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 42 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 42 samples exceed the water quality objectives for Municipal and Domestic Supply or Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41707, Nitrate **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	13975
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304LAG_CCL - Laguna Creek at Mouth]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41707, Nitrate **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	18168
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41707, Nitrate **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	18167
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41707, Nitrate **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	13976
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A

Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304LAG_CCL - Laguna Creek at Mouth]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID 41709 Region 3

Laguna Creek (Santa Cruz County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective for Cold Freshwater Habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41709, Oxygen, Dissolved Region 3

Laguna Creek (Santa Cruz County)

LOE ID:	18247
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41270 Region 3

Laguna Creek (Santa Cruz County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the water quality objective for agricultural uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 4 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41270, Specific Conductivity **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	17610
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41777** **Region 3**

Laguna Creek (Santa Cruz County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41777, Temperature, water — Region 3

Laguna Creek (Santa Cruz County)

LOE ID:	18787
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41710 Region 3

Laguna Creek (Santa Cruz County)

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the Agricultural Supply, Cold Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Agricultural Supply, Cold Freshwater Habitat, Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41710, pH Region 3

Laguna Creek (Santa Cruz County)

LOE ID:	19056
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41710, pH **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	19055
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation: Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41710, pH **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID: 19054

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Agricultural Supply

Number of Samples: 4
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference: Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation: Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41710, pH **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID: 19073

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41710, pH **Region 3**

Laguna Creek (Santa Cruz County)

LOE ID:	19072
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Laguna Creek(304) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Laguna Creek(304) was collected at 1 monitoring site [304-LAGUN-21 - Laguna Creek On Laguna Rd]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Vicente Creek (Santa Cruz County)**
Water Body ID: **CAR3041102320020124141932**
Water Body Type: **River & Stream**

DECISION ID **44336** **Region 3**
San Vicente Creek (Santa Cruz County)

Pollutant: **Sedimentation/Siltation**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The original decision to list San Vicente Creek for Sedimentation is inconsistent with the Listing Policy and evaluation of the complete data set and new data indicate that beneficial uses are supported. This conclusion is based on the following supporting evidence:
First, the original decision to add the water segment to the CWA section 303(d) List was based on a partial data set (summarized in LOE 1835) and when combined with the complete data set for the period of record (LOEs 1835 and 30273), the decision should have been Do Not List . Based on the available data (49 months of daily turbidity measurements), 158 of the 1483 samples exceed the water quality objective (Drinking Water MCL of 5 NTU's) and this does not exceed the allowable frequency listed in Tables 3.2 or 4.2 of the Listing Policy. Furthermore, when dry weather months are excluded (June, July, August, and September) from this assessment, there are a total of 1027 samples with 157 exceedances of the Drinking Water MCL and again supports the removal of this water segment / pollutant combination from the 303(d) List.

Second, the original decision to add the water segment to the CWA section 303(d) List was supported by the habitat typing data presented in LOE # 1838. However, these data do not meet the following criteria of the Listing Policy and therefore can not be used alone to support a listing for sedimentation:
1. Section 3.8 of the Listing Policy states "For adverse biological response related to sedimentation, the water segment shall be placed on the section 303(d) list if adverse biological response is identified and effects are associated with clean sediment load..."

Based on the data and information provided, no adverse biological response has been identified. Furthermore, a recent publication Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker and Reining, 2008) discusses two recent fish population sampling events in 1998 and 2006. Both found multiple year classes and a 2001 resources protection plan states that San Vicente Creek supports a healthy steelhead run .

2. Section 3.8 of the Listing Policy goes on to say "Waters shall be placed on the section 303(d) list if evaluation of guidelines (satisfying the conditions of section 6.1.3) are exceeded using the binomial distribution in section 3.1." Section 6.1.3 identifies the criteria required for an evaluation guideline to be used. No evaluation guideline is cited for this line of evidence. Therefore, this line of evidence does not meet the requirements of the Listing Policy.

3. Section 6.1.4 of the Listing Policy states that numeric data are considered credible and relevant for listing purpose if the data set submitted meets the minimum quality assurance/quality control requirements . These include a QAPP or equivalent documentation. No quality assurance

documentation is available for the Habitat Typing data summarized in the Line of Evidence and therefore it does not meet the requirements of the Listing Policy.

Finally, a 2010 habitat typing report for San Vicente Creek contradicts the findings summarized in LOE 1838 (which summarizes a habitat typing report from 1995). Specifically, 74 percent of the 123 pool tail-out areas evaluated were scored as good spawning conditions and the dominate substrate was recorded as gravel and small cobble. Note that 20 percent of the pool tail-out areas evaluated were scored unsuited for spawning due to inappropriate substrate such as bedrock, log sills, boulders, or other considerations unrelated to embeddeness in fine sediment .

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used do not satisfy the data quality requirements of section 6.1.4 of the Policy and therefore should not be used alone to make this decision.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. When the entire turbidity data set is evaluated, 158 of the 1483 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. When the dry weather months are eliminated from the turbidity data set is evaluated, 157 of the 1027 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
5. A more recent habitat typing assessment from this water segment indicates good spawning habitat and therefore the findings of the 1995 report are contradicted.
6. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 44336, Sedimentation/Siltation **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	59009
Pollutant:	Sediment
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Spawning
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Surveys of fish and game biologists/other professionals
Data Used to Assess Water Quality:	Water Board staff reviewed California Dept. of Fish and Wildlife Stream Habitat Assessment Report for San Vicemte Creek (surveyed in 2010) to evaluate impacts to beneficial uses. The following excerpts are taken from the report's conclusions. Note, each data type listed below is obtained by visual estimate. Embeddeness: The depth of cobble embeddedness was estimated at pool tail-outs. Of the 123 pool tail-outs measured, 13 had a value of 1 (11%), 78 had a value of 2 (63%), 8 had a value of 3 (7%), 24 had a value of 5 (20%) (Graph 6). On this scale, a value of 1 indicates the best spawning conditions and a value of 4 the worst. Additionally, a value of 5 was assigned to tail-outs deemed unsuited for spawning due to inappropriate substrate such as bedrock, log sills, boulders, or other considerations unrelated to embeddeness in fine sediment. Dominant substrate: Eighty of the 123 pool tail-outs measured had gravel and small cobble

	as the dominant substrate. This is generally considered good for spawning salmonids.
Data Reference:	California Department of Fish and Wildlife Santa Cruz County Big Basin Coastal Watershed Stream Habitat Assessment Reports. San Vicente Creek, Surveyed 2010, Report Completed in 2013.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisamce or adversely affect beneficial uses (CCRWQCP, Water Quality Control Plan (Basin Plan) General Objective)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	none
Guideline Reference:	California Department of Fish and Wildlife Santa Cruz County Big Basin Coastal Watershed Stream Habitat Assessment Reports. San Vicente Creek, Surveyed 2010, Report Completed in 2013.
Spatial Representation:	The total length of the stream surveyed was 18,127 feet with an additional 536 feet of side channel. The survey began at the confluence with Pacific Ocean and extended upstream 3.4 miles.
Temporal Representation:	The habitat inventory was conducted by two Watershed Stewards Project/AmeriCorps (WSP) Members between 6/14/2010 and 6/21/2010.
Environmental Conditions:	
QAPP Information:	There is no Quality Assurance documentation for this data. The habitat inventory conducted in San Vicente Creek follows the methodology presented in the California Salmonid Stream Habitat Restoration Manual (Flosi et al, 1998). The Watershed Stewards Project/AmeriCorps (WSP) Members that conducted the inventory were trained in standardized habitat inventory methods by the California Department of Fish and Wildlife (CDFW). The protocol does not ourline any qualty control measurements or visual estimates.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44336, Sedimentation/Siltation **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	1838
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Narrative Description Data
Matrix:	Water
Fraction:	None
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	70
Number of Exceedances:	57
Data and Information Type:	HABITAT ASSESSMENT
Data Used to Assess Water Quality:	Flatwater habitat types comprised 76% of the total length of the survey, riffles comprised 8%, and pools comprised 15%. The pools are relatively shallow, with only 21 of the 70 (30%) pools having a maximum depth greater than 3 feet. Fifty-seven of the 70 pool tail-outs measured had embeddedness rating greater than 50% (CCRWQCB, 2004f). The relatively large amount of cover is provided by primarily boulders in a habitat types. The mean percent canopy density for the stream was 87% which is considered adequate cover for juvenile coho salmon and steelhead. The percentage of right and left bank covered with vegetation was moderate at 73% and 76% respectively. Two gradients riffles measured had large cobble as the dominant substrate. Large cobble was also dominant in 4 of the 7 step runs measured.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Seven sites were sampled. San Vicente Creek is a B3 channel type for the entire 3.40 miles (17,930 feet) of stream surveyed.
Temporal Representation: The stream was surveyed on October 16, 17, and 21 of 1995.
Environmental Conditions:
QAPP Information: Biological sampling during stream inventory was used to determine fish species composition and their distribution throughout the stream. In San Vicente fish presences was observed from the stream banks and seven sites were sampled using a Smith-Root Model 12 Backpack electrofishing unit. The sampling techniques are discussed in the California Salmonid Stream Habitat Restoration Manual.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44336, Sedimentation/Siltation **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID: 30273

Pollutant: Turbidity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1392
Number of Exceedances: 136

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: The Davenport Sanitation District (DSD), which withdraws water from San Vicente Creek to serve the town of Davenport (adjacent to San Vicente Creek) has been unable to produce potable drinking water during periods of heavy rainfall due to high levels of turbidity. Turbidity levels at the influent are measured daily by the County of Santa Cruz Water and Wastewater Division at the Davenport Water influent. A total of 157 out of 1485 daily measurements taken between February 2002 and February 2007 were in exceedance of the criterion (data submitted by M. Duffy from Redwood Empire). This does not includ the three months of data summarized in LOE # 1835.
Data Reference: San Vicente Creek Turbidity data Feb 2002 - Feb 2007

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Title 22 Secondary MCL = 5 Units
Objective/Criterion Reference: Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Single monitoring location - at the Davenport water treatment plant intake point.
Temporal Representation: Daily measurements from February 2002 as well as January 2003- February 2007. There are 5 months missing from this data set and they include July 2003, December 2003, April 2004, October 2006 and December 2006. These data are in addition to the data summarized in LOE # 1835 (for 31 days in December 2001, 30 days in January 2002, and 30 days in December 2002).
Environmental Conditions: Information on the environmental condition at the intake is not included with this data.
QAPP Information: Information on the Quality Assurance associated with this data is not provided. However, the administrative record for the original 2006 List of impaired waters contains an email from staff at the treatment plant stating that the Turbidity meter is calibrated quarterly, and more

	often in inclement weather, using solid standards provided by the manufacturer
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44336, Sedimentation/Siltation **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19416
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44336, Sedimentation/Siltation **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	1835
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply

Number of Samples:	91
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The Davenport Sanitation District (DSD), which withdraws water from San Vicente Creek to serve the town of Davenport (adjacent to San Vicente Creek) has been unable to produce potable drinking water during periods of heavy rainfall due to high levels of turbidity. Turbidity levels at the influent were measured for 31 days in December 2001, 30 days in January 2002, and 30 days in December 2002 by the County of Santa Cruz Water and Wastewater Division at the Davenport Water influent. Twenty-two of 91 measurements were in exceedance of the criterion (Frediani, J. 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 22 Secondary MCL = 5 Units
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected in San Vicente Creek at the Davenport water treatment plant intake point.
Temporal Representation:	Samples were collected daily in December 2001, January 2002, and December 2002. Other data have been collected, but were available at time of data solicitation.
Environmental Conditions:	Records state that standards are exceeded "during periods of heavy rainfall". The watershed is primarily privately owned and is managed for timber production, open pit mining, cattle grazing, urbanization and water diversion.
QAPP Information:	State Board was unable to obtain any QA/QC information.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44336, Sedimentation/Siltation **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	1836
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	HABITAT ASSESSMENT
Data Used to Assess Water Quality:	Stream Inventory Report by DFG - 1995-1996 (Frediani, J. 2004): - Over 81% of the pool tail crests surveyed had greater than 51% embeddedness. - 76% of the surveyed stream length was flat water (indicates lack of needed pools). - The pools surveyed were relatively shallow 70% were less than 3 feet deep. - LWD (Large Woody Debris) was lacking in nearly all habitats. - Mean shelter rating for pools was low with a rating of 12. A pool shelter rating of approximately 100 is desirable. -Threatened/endangered species in the creek (coho salmon, steelhead trout, California red-legged frog) are suffering from habitat degradation and associated decreased carrying capacity. - Large cobble (dominant in 4 of 7 step runs measured) is considered unsuitable for spawning steelhead and coho salmon. - The percentage of bank covered with vegetation was moderate at 73-76%.
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	WQO: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	San Vicente Creek (304.11) was sampled. Biological sampling occurred at 7 sites and observations were made from the stream banks throughout the stream. The habitat was assessed throughout the stream with an inventory method that samples approximately 10% of the flatwater and riffle habitat.
Temporal Representation:	The San Vicente Creek Stream Inventory Report was conducted by DFG on 7/9/1996 - 7/14/1996. Fish presence was observed on Oct. 16, 17, 21, 1995.
Environmental Conditions:	The watershed is primarily privately owned and is managed for timber production, open pit mining, cattle grazing, urbanization and water diversion.
QAPP Information:	The Habitat Inventory follows the methodology from the California Salmonid Stream Habitat Restoration Manual (Flosi and Reynolds, 1991 rev. 1994). The California Conservation Corps (CCC) Technical Advisors and Watershed Stewards Project/AmeriCorps (WSP/AmeriCorps) Members that conducted the inventory were trained in standardized habitat inventory methods by the California Department of Fish and Game (DFG). This inventory was conducted by a two-person team. Fish were sampled by DFG using a Smith-Root Model 12 backpack electrofishing unit. Sampling techniques are discussed in the California Salmonid Stream Habitat Restoration Manual.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44336, Sedimentation/Siltation **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	30272
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration | Fish Spawning | Warm Freshwater Habitat | Wildlife Habitat
Number of Samples:	1483
Number of Exceedances:	42
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Daily turbidity measurements taken from the influent at the Davenport Water treatment plant. Forty-two of the 1483 measurements exceed 25 NTU's (the evaluation guideline protective of steelhead trout).
Data Reference:	San Vicente Creek Turbidity data Feb 2002 - Feb 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.

Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Single monitoring location - at the Davenport water treatment plant intake point.
Temporal Representation:	Daily measurements the month of December 2001- February 2002 and December 2002. Daily data between March 2002 and November 2002 is not provided. In addition, daily measurements from January 2003- February 2007. There are 5 months missing from this data set and they include July 2003, December 2003, April 2004, October 2006 and December 2006. These data are in addition to the data summarized in LOE # 1835 (for 31 days in December 2001, 30 days in January 2002, and 30 days in December 2002).
Environmental Conditions:	Information on the environmental condition at the intake is not included with this data.
QAPP Information:	Information on the Quality Assurance associated with this data is not provided. However, the administrative record for the original 2006 List of impaired waters contains an email from staff at the treatment plant stating that the Turbidity meter is calibrated quarterly, and more often in inclement weather, using solid standards provided by the manufacturer.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44336, Sedimentation/Siltation **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	1837
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Population/Community Degradation
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Preservation of Rare & Endangered Species
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Site one yielded 37 steelhead ranging in total length from 62 millimeters to 187 millimeters and 1 coho salmon (81mm total length). Site two yielded 67 steelhead ranging in total length from 59 to192 mm, 2 sculpin (125mm and 137mm) and 1 coho (90 mm). Site three yielded 32 steelhead ranging in total length 53 - 188 mm and 4 sculpin ranging in length from 110 mm - 169 mm. Site four yielded 12 steelhead ranging in total length from 55 - 157mm and 1 sculpin (117mm). Site five yielded 25 steelhead ranging in total length from 60 - 206mm, 1 coho salmon (85mm) and 1 Pacific giant salamander. Site six yielded 30 steelhead ranging in total length from 54 mm - 269 mm. Site seven yielded 25 steelhead ranging in total length from 57 - 242 mm 2 Pacific giant salamanders and a red-legged frog (CCRWQCB, 2004f).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	WQO: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Seven sites were sampled. The first site was located at stream mile 0.16 and included 2 mid-channel pools and a run. The second site was located at stream mile 0.49 and included a lateral scout pool (root wad enhanced), a run and a riffle. The third site was located at stream mile 1.01 and included a lateral scour pool, (root wad enhanced), a riffle and a mid-channel pool. The fourth site was located at stream mile 1.95 and included a riffle, a run, and a mid-channel pool. The fifth site was located at stream mile 2.6 and included 2 mid-channel pools and a riffle. Site six was located at stream mile 2.93 and included a mid-channel, a riffle, and a plunge. Site seven was located at stream mile 3.3 and included 2

	plunge pools and a step run.
Temporal Representation:	Samples were collected on October 16, 17, and 21 of 1995.
Environmental Conditions:	
QAPP Information:	The Habitat Inventory follows the methodology from the California Salmonid Stream Habitat Restoration Manual (Flosi and Reynolds, 1991 rev. 1994). The California Conservation Corps (CCC) Technical Advisors and Watershed Stewards Project/AmeriCorps (WSP/AmeriCorps) Members that conducted the inventory were trained in standardized habitat inventory methods by the California Department of Fish and Game (DFG). This inventory was conducted by a two-person team. Fish were sampled by DFG using a Smith-Root Model 12 backpack electrofishing unit. Sampling techniques are discussed in the California Salmonid Stream Habitat Restoration Manual.
QAPP Information Reference(s):	

DECISION ID 38291 **Region 3**

San Vicente Creek (Santa Cruz County)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. The sample size for the evaluation guideline for both water contact and non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 5 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 5 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 5 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 5 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38291, Escherichia coli (E. coli) **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	18426
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38291, Escherichia coli (E. coli) Region 3

San Vicente Creek (Santa Cruz County)

LOE ID:	18425
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for

	Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38291, Escherichia coli (E. coli) Region 3

San Vicente Creek (Santa Cruz County)

LOE ID:	19705
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]

Temporal Representation:	Data was collected over the time period 12/11/2001-8/28/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38291, Escherichia coli (E. coli) **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19704
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-8/28/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 38202 **Region 3**

San Vicente Creek (Santa Cruz County)

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. None of the 12 samples exceed the water quality objectives for Municipal & Domestic Supply or for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 12 samples exceed the water quality objectives for Municipal & Domestic Supply or for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38202, Nitrate **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19709
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 2/25/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38202, Nitrate **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	18224
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38202, Nitrate **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	18208
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38202, Nitrate **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19708
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 2/25/1998-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 38156 Region 3

San Vicente Creek (Santa Cruz County)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 9 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 9 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38156, Oxygen, Dissolved **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	17960
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38156, Oxygen, Dissolved **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19790
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 38182 Region 3

San Vicente Creek (Santa Cruz County)

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. None of the 10 samples exceed the Agricultural

Supply water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 10 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38182, Specific Conductivity **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	17442
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38182, Specific Conductivity **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19804
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 38157 **Region 3**

San Vicente Creek (Santa Cruz County)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 10 samples exceed the Cold Freshwater Habitat water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 10 samples exceed the Cold Freshwater Habitat water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38157, Temperature, water **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19199
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan,

	Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38157, Temperature, water **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	18822
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	38217	Region 3
San Vicente Creek (Santa Cruz County)		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. None of the 10 samples exceed the Agricultural Supply water quality objective, 1 of 10 samples exceed the Cold Freshwater Habitat water quality objective and None of the samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 10 samples exceed the Agricultural Supply water quality objective, 1 of 10 samples exceed the Cold Freshwater Habitat water quality objective and none of the samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38217, pH	**Region 3**
San Vicente Creek (Santa Cruz County)	

LOE ID:	19465
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the

	criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38217, pH **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19464
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38217, pH **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	18719
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38217, pH **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	18720
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38217, pH **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19439
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38217, pH **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19463
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to

protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38217, pH **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	19462
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304SVM_SCC - SAN VICENTE CR at MOUTH]
Temporal Representation:	Data was collected over the time period 12/11/2001-5/16/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38217, pH **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	18737
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38217, pH **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	18738
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38217, pH **Region 3**

San Vicente Creek (Santa Cruz County)

LOE ID:	18721
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for San Vicente Creek (Santa Cruz County) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Vicente Creek (Santa Cruz County) was collected at 1 monitoring site [304-SANVI-21 - San Vicente Creek In Davenport]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Molino Creek**
Water Body ID: **CAR3041102320020117163631**
Water Body Type: **River & Stream**

DECISION ID **41901** **Region 3**
Molino Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the 3 samples exceed Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 3 samples exceed Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use. None of the 3 samples exceed the water quality objective for Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41901, Escherichia coli (E. coli) **Region 3**
Molino Creek

LOE ID: 18485

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3

Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41901, Escherichia coli (E. coli) **Region 3**

Molino Creek

LOE ID:	18500
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42146 Region 3

Molino Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objectives for Agricultural Supply or for Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the water quality objectives for Agricultural Supply or for Municipal and Domestic Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42146, Nitrate Region 3

Molino Creek

LOE ID:	18264
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42146, Nitrate **Region 3**

Molino Creek

LOE ID:	18265
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).

Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42158 Region 3
Molino Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 4 samples exceed the Cold Freshwater Habitat water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 4 samples exceed the Cold Freshwater Habitat water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42158, Oxygen, Dissolved Region 3
Molino Creek

LOE ID:	18197
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**42198**	**Region 3**
Molino Creek		

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Note that the pollutant name for the older LOEs and decisions is electrical conductivity. This was an error and the pollutant name should have always been specific conductivity. For this reason, the pollutant name was changed for this decision and sample and exceedance counts are summed for LOEs with both pollutant names in this assessment for specific conductivity. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Agricultural Supply water quality objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42198, Specific Conductivity **Region 3**

Molino Creek

LOE ID:	17423
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	42159	Region 3
Molino Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42159, Temperature, water	**Region 3**
Molino Creek	

LOE ID:	18768
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be

	demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 42149 Region 3
Molino Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the water quality objectives were exceeded. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the water quality objectives were exceeded and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42149, pH Region 3
Molino Creek

LOE ID:	19126
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42149, pH **Region 3**

Molino Creek

LOE ID:	19143
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays,

	and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42149, pH **Region 3**

Molino Creek

LOE ID:	19124
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42149, pH **Region 3**

Molino Creek

LOE ID:	19123
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42149, pH **Region 3**

Molino Creek

LOE ID:	19125
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Molino Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Molino Creek was collected at 1 monitoring site [304-MOLIN-21 - Molino Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Little Creek**
Water Body ID: **CAR3041102219990304133846**
Water Body Type: **River & Stream**

DECISION ID **41050** **Region 3**
Little Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the water quality objectives for Water Contact Recreation or Non-Contact Recreation and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41050, Escherichia coli (E. coli) **Region 3**
Little Creek

LOE ID: 18443

Pollutant: Escherichia coli (E. coli)
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 3
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day

	monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41050, Escherichia coli (E. coli) **Region 3**

Little Creek

LOE ID:	18444
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41042** **Region 3**
Little Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objectives for Agricultural Supply or Municipal and Domestic Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 3 samples exceed the water quality objectives for Agricultural Supply or Municipal and Domestic Supply. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41042, Nitrate **Region 3**
Little Creek

LOE ID:	18383
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41042, Nitrate **Region 3**

Little Creek

LOE ID:	18384
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 41092 Region 3
Little Creek

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess these pollutants. Two water quality objectives are assessed: Neither of the two sample exceeds the dissolved oxygen water quality objective for Cold Freshwater Habitat. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Neither of the two sample exceeds the dissolved oxygen water quality objective for Cold Freshwater Habitat and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. In addition, the median value did not exceed the General Objective. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41092, Oxygen, Dissolved Region 3
Little Creek

LOE ID:	17961
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/1/2004. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41092, Oxygen, Dissolved **Region 3**

Little Creek

LOE ID:	18005
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41093** **Region 3**

Little Creek

Pollutant:	**Specific Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 4 samples exceed the water quality objective for Agricultural Supply. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 4 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41093, Specific Conductivity **Region 3**

Little Creek

LOE ID:	17443
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41093, Specific Conductivity **Region 3**

Little Creek

LOE ID:	17577
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).

Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected on a single day 5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**41032**	**Region 3**
Little Creek		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective for Agricultural Supply. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 4 samples exceed the water quality objective for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41032, Temperature, water	**Region 3**
Little Creek	

LOE ID:	18837
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID **41049** **Region 3**

Little Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. None of the 4 samples exceed the water quality objective for Agricultural Supply. One sample exceed the Cold Freshwater Habitat water quality objective. None of the 4 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 4 samples exceed the water quality objective for Agricultural Supply. One sample exceed the Cold Freshwater Habitat water quality objective. None of the 4 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41049, pH **Region 3**

Little Creek

LOE ID:	18947
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41049, pH **Region 3**

Little Creek

LOE ID:	18946
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41049, pH **Region 3**

Little Creek

LOE ID:	18740
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41049, pH **Region 3**

Little Creek

LOE ID:	18741
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41049, pH **Region 3**

Little Creek

LOE ID:	18739
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Little Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Little Creek was collected at 1 monitoring site [304-LITTL-21 - Little Creek, Above confluence of Scott Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Waddell Creek**
Water Body ID: **CAR3041101120020124153134**
Water Body Type: **River & Stream**

DECISION ID **37618** **Region 3**
Waddell Creek

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.

The 2010 assessment decision language stated the following:
This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Seven lines of evidence are available in the administrative record to assess this pollutant. Seven of 106 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 67 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 106 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 67 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37618, Escherichia coli (E. coli) **Region 3**
Waddell Creek

LOE ID: 14128

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37618, Escherichia coli (E. coli) Region 3

Waddell Creek

LOE ID:	18519
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.

Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37618, Escherichia coli (E. coli) **Region 3**

Waddell Creek

LOE ID:	10212
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37618, Escherichia coli (E. coli) **Region 3**

Waddell Creek

LOE ID:	18520
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37618, Escherichia coli (E. coli) **Region 3**

Waddell Creek

LOE ID:	14113
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37618, Escherichia coli (E. coli) Region 3

Waddell Creek

LOE ID:	10213
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 1/19/2005-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 37618, Escherichia coli (E. coli) **Region 3**

Waddell Creek

LOE ID:	52789
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 3 of 39 samples exceed the criterion for Escherichia coli.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **37455** **Region 3**

Waddell Creek

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.

The 2010 assessment decision language stated the following:
This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Seven of 94 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 94 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 94 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 1 of 94 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37455, Fecal Coliform **Region 3**

Waddell Creek

LOE ID:	52800
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [

	304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37455, Fecal Coliform **Region 3**

Waddell Creek

LOE ID:	52788
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Waddell Creek to determine beneficial use support and results are as follows: 5 of 39 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Coastal Confluences field data 2007-2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 2/20/2007-6/14/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 37455, Fecal Coliform **Region 3**

Waddell Creek

LOE ID:	10171

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	55
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 55 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37455, Fecal Coliform **Region 3**

Waddell Creek

LOE ID:	10172
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Coliform, Fecal.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37413 Region 3
Waddell Creek

Pollutant:	**Ammonia (Unionized)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37413, Ammonia (Unionized) Region 3
Waddell Creek

LOE ID:	9279
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37574**	**Region 3**
Waddell Creek		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37574, Anthracene **Region 3**

Waddell Creek

LOE ID:	14799
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	37575	Region 3
Waddell Creek		

Pollutant:	**Arsenic**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37575, Arsenic	**Region 3**
Waddell Creek	

LOE ID:	15839
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1

	samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	37225	Region 3
Waddell Creek		

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37225, Benzo(a)anthracene **Region 3**

Waddell Creek

LOE ID:	15663
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37224** **Region 3**

Waddell Creek

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeded the Evaluation Guideline (MacDonald et al. 2000) as it applies to the Cold Freshwater habitat beneficial use and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37224, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Waddell Creek

LOE ID:	15532
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III,

	Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37442 Region 3
Waddell Creek

Pollutant:	**Boron**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37442, Boron Region 3
Waddell Creek

LOE ID:	9280
Pollutant:	Boron
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 50 samples exceed the criterion for Boron, dissolved.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for boron for irrigation supply is 0.75 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37443**	**Region 3**
Waddell Creek		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37443, Cadmium **Region 3**

Waddell Creek

LOE ID:	15381
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37603** **Region 3**

Waddell Creek

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37603, Chloride **Region 3**

Waddell Creek

LOE ID:	9281
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 16 of 50 samples exceed the criterion for Chloride.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	38912	Region 3
Waddell Creek		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 38912, Chlorophyll-a	**Region 3**
Waddell Creek	

LOE ID:	9257
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	55
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 55 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38912, Chlorophyll-a **Region 3**

Waddell Creek

LOE ID:	11974
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected on a single day 7/6/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42585	Region 3
Waddell Creek		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sediment sample (pore water) exceeded the Evaluation Guideline (Siepmann and

Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. Pore water samples will not be the sole basis for any decision.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 42585, Chlorpyrifos **Region 3**

Waddell Creek

LOE ID:	15989
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36866	Region 3
Waddell Creek		

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 36866, Chromium	**Region 3**
Waddell Creek	

LOE ID:	16075
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	36748	Region 3
Waddell Creek		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 36748, Chrysene (C1-C4) **Region 3**

Waddell Creek

LOE ID:	15920
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **36670** **Region 3**

Waddell Creek

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	Do Not List on 303(d) list (TMDL required list)(2012)

Listing Decision:	
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 36670, Copper **Region 3**

Waddell Creek

LOE ID:	16746
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42586**	**Region 3**
Waddell Creek		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 42586, Diazinon **Region 3**

Waddell Creek

LOE ID:	16627
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42596** **Region 3**

Waddell Creek

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.

The 2010 assessment decision language stated the following:
This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 42596, Dieldrin **Region 3**

Waddell Creek

LOE ID:	16715
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36671 Region 3
Waddell Creek

Pollutant:	**Electrical Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The new decision name has been changed to Specific Conductivity and contains all of the LOEs in this decision.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 36671, Electrical Conductivity Region 3
Waddell Creek

LOE ID:	19765
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36671, Electrical Conductivity **Region 3**

Waddell Creek

LOE ID:	10173
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 6 of 56 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as

	derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36671, Electrical Conductivity **Region 3**

Waddell Creek

LOE ID:	17515
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Conductivity(ms).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected on a single day 5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36671, Electrical Conductivity **Region 3**

Waddell Creek

LOE ID:	17482
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36671, Electrical Conductivity **Region 3**

Waddell Creek

LOE ID:	10417
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Conductivity(Us).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42633	Region 3
Waddell Creek		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 42633, Endrin **Region 3**

Waddell Creek

LOE ID:	16529
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	37607	Region 3
Waddell Creek		

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 39 samples exceed the water quality objectives for the Water Contact Recreation or Non-contact Recreation beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 39 samples exceed the water quality objectives for the Water Contact Recreation or Non-contact Recreation beneficial uses, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37607, Enterococcus	**Region 3**
Waddell Creek	

LOE ID:	14218
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental

	Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 39 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1].
Temporal Representation:	Data was collected monthly over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37607, Enterococcus **Region 3**

Waddell Creek

LOE ID:	13913
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.

QAPP Information Reference(s):

DECISION ID	42000	Region 3
Waddell Creek		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 42000, Fluoranthene	**Region 3**
Waddell Creek	

LOE ID:	16600
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42001**	**Region 3**
Waddell Creek		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence

of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 42001, Fluorene **Region 3**
Waddell Creek

LOE ID:	16432
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37456** **Region 3**
Waddell Creek

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37456, Lead **Region 3**

Waddell Creek

LOE ID:	17326
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37398**	**Region 3**
Waddell Creek		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37398, Mercury **Region 3**

Waddell Creek

LOE ID:	17128
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42011** **Region 3**

Waddell Creek

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 42011, Naphthalene **Region 3**

Waddell Creek

LOE ID:	17229
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37593**	**Region 3**
Waddell Creek		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37593, Nickel **Region 3**

Waddell Creek

LOE ID:	17046
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37582** **Region 3**

Waddell Creek

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek

mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37582, Nitrate **Region 3**

Waddell Creek

LOE ID:	9282
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37582, Nitrate **Region 3**

Waddell Creek

LOE ID:	9283

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37582, Nitrate **Region 3**

Waddell Creek

LOE ID:	14018
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental

Data Reference:	Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N. Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37582, Nitrate **Region 3**

Waddell Creek

LOE ID:	19670
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 2/23/1999-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37582, Nitrate **Region 3**

Waddell Creek

LOE ID:	19669
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 2/23/1999-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37582, Nitrate **Region 3**

Waddell Creek

LOE ID:	14017
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	39
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 39 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 1/25/2002-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37582, Nitrate **Region 3**

Waddell Creek

LOE ID:	17975
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer

	Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37582, Nitrate **Region 3**

Waddell Creek

LOE ID:	17974
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/7/2005. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 37105 Region 3

Waddell Creek

Pollutant:	**Nitrogen, ammonia (Total Ammonia)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The pollutant name has been changed in the new decision for Waddell Creek Lagoon to 'Ammonia'.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37105, Nitrogen, ammonia (Total Ammonia) Region 3

Waddell Creek

LOE ID:	9278
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 56 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).

Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37105, Nitrogen, ammonia (Total Ammonia) Region 3

Waddell Creek

LOE ID:	13987
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 20 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD_CCL - Waddell Creek at HWY 1]
Temporal Representation:	Data was collected over the time period 10/21/2003-6/20/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID	37424	Region 3
Waddell Creek		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37424, Oxygen, Dissolved	**Region 3**
Waddell Creek	

LOE ID:	19724
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]

Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37424, Oxygen, Dissolved **Region 3**

Waddell Creek

LOE ID:	11938
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 6 of 56 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37424, Oxygen, Dissolved **Region 3**

Waddell Creek

LOE ID:	18001
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37424, Oxygen, Dissolved **Region 3**

Waddell Creek

LOE ID:	11956
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37424, Oxygen, Dissolved **Region 3**

Waddell Creek

LOE ID:	11957
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 5 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37424, Oxygen, Dissolved — Region 3

Waddell Creek

LOE ID:	11937
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 56 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42003 — Region 3

Waddell Creek

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek

mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.

The 2010 assessment decision language stated the following:
This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 42003, Phenanthrene **Region 3**

Waddell Creek

LOE ID:	16879
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42004 Region 3

Waddell Creek

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 42004, Pyrene Region 3

Waddell Creek

LOE ID:	17824

Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**37610**	**Region 3**
Waddell Creek		

Pollutant:	**Sodium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37610, Sodium **Region 3**

Waddell Creek

LOE ID:	9256
Pollutant:	Sodium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	50
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 16 of 50 samples exceed the criterion for Sodium.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when sodium exceeds 69 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **37611** **Region 3**

Waddell Creek

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37611, Temperature, water **Region 3**

Waddell Creek

LOE ID:	11955
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 4 of 56 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37611, Temperature, water **Region 3**

Waddell Creek

LOE ID:	19571
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37611, Temperature, water **Region 3**

Waddell Creek

LOE ID:	18564
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37611, Temperature, water **Region 3**

Waddell Creek

LOE ID:	11973
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/17/2004. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38932 Region 3

Waddell Creek

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following:
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 38932, Toxicity Region 3

Waddell Creek

LOE ID:	24680
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when

	compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 38978 Region 3

Waddell Creek

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because this decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 38978, Turbidity Region 3

Waddell Creek

LOE ID:	11972
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38978, Turbidity **Region 3**

Waddell Creek

LOE ID:	19232
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996

	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38978, Turbidity **Region 3**

Waddell Creek

LOE ID:	11954
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	49
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 4 of 49 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]

Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37605 **Region 3**

Waddell Creek

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach. The 2010 assessment decision language stated the following: This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. One line of evidence is available in the administrative record to assess this pollutant. The sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37605, Zinc **Region 3**

Waddell Creek

LOE ID:	17919
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (03SW3001) data for Waddell Creek to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD001 - Waddell Creek at Highway 1]
Temporal Representation:	Data was collected on a single day 3/29/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 37350 Region 3

Waddell Creek

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision is being retired because the data associated with this decision were collected from stations located in a newly delineated Lagoon (Waddell Creek Lagoon which is mapped from the creek mouth to the top of the lagoon). These LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon because the data were collected within that reach.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the site where all data was collected is tidally influenced and the geology of the watershed if of marine origin, likely contributing to naturally high pH levels. This decision is being retired and these LOEs and the decision language will be associated with a new decision for Waddell Creek Lagoon.

Line of Evidence (LOE) for Decision ID 37350, pH Region 3

Waddell Creek

LOE ID:	19869
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10174
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	56
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 11 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	19885
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	19886
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	19887

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	18608
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	18609
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	18606
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	18607
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and

	results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	18592
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 2 monitoring sites [304-WADDE-22 - Waddell Creek, 304-WADDE-21 - Waddell Creek]
Temporal Representation:	Data was collected over the time period 5/1/2004-5/6/2006. Coastal Watershed Council

	Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10416
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	56
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 12 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10209
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10210
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10211
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10190
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	56
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 9 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10191
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	56
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 12 of 56

	samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10192
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	56
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Waddell Creek to determine beneficial use support and results are as follows: 12 of 56 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]

Temporal Representation:	Data was collected over the time period 5/1/2001-12/18/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10193
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	10194

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Waddell Creek to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAD-Waddell Creek Lagoon at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/2001-8/29/2001. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37350, pH **Region 3**

Waddell Creek

LOE ID:	19870
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Waddell Creek to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996

	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Waddell Creek was collected at 1 monitoring site [304WAM_SCC - WADDELL CR at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-5/24/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Waddell Creek, East Branch**
Water Body ID: **CAR3041101019980828121908**
Water Body Type: **River & Stream**

DECISION ID **32975** **Region 3**
Waddell Creek, East Branch

Pollutant: **Nutrients**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Original
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under section 4.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 54 samples exceeded the unionized ammonia water quality objective and this does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32975, Nutrients **Region 3**
Waddell Creek, East Branch

LOE ID: 1834

Pollutant: Nutrients
LOE Subgroup: Testimonial Evidence
Matrix: Not Specified
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 54
Number of Exceedances: 0

Data and Information Type: Not Specified

Data Used to Assess Water Quality:	Fifty-four samples were collected and the objective was not exceeded in any of the samples (CVRWQCB, 2004B). From Report: The east fork of the Waddell Creek was listed as impaired for nutrients in 1990. The creek was listed because of ammonia violations at the NPDES facility, California Department of Parks and Recreation, Big Basin Redwoods State Park Wastewater Treatment Plant. Another reason for the listing was the California Department of Fish and Game issued a report in 1980 indicating dense growths of filamentous algae were growing downstream of the treatment plant in sunlight areas. They attributed the algal growth to nutrients. Ammonia discharge violations have reoccurred in the past but no violations have occurred since 2002. Ammonia is converted to nitrate through the nitrogen cycle and becomes available as a possible promoter of plant growth. Since the listing in 1990, the treatment plant has been upgraded. The upgrade included the addition of clinoptolite filtration for ammonia removal. Ammonia violations have dramatically decreased since 1998.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	From delisting report: The Water Quality Control Plan, Central Coast Region (Basin Plan), contains the following unionized ammonia objective: The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters. The Water Quality Control Plan, Central Coast Region (Basin Plan), contains the following narrative objective: Biostimulatory Substances: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses. This objective does not prohibit biostimulatory substances; it only prohibits biostimulatory substances that cause nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Waddell Creek, East Branch (Calwater Watershed: 30411010), located in Santa Cruz County, California approximately two-thirds of the way from San Francisco to Monterey Bay. Samples were collected at: West Waddell Creek upstream confluence of East Waddell Creek; Opal Creek upstream confluence of East Waddell Creek; Blooms Creek upstream confluence of East Waddell Creek; East Branch of Waddell Creek 145 feet upstream of NPDES discharge; East Branch of Waddell Creek 100 feet downstream of NPDES discharge; East Branch of Waddell Creek approximately 1000 feet upstream of old Last Chance Road bridge crossing; East Branch of Waddell Creek at old Last Chance Road bridge crossing; East Waddell Creek upstream confluence of West Waddell Creek; Lower Waddell Creek ~ one mile downstream confluence of East and West Waddell Creek; Lower Waddell at Alder Camp; Lower Waddell at bridge; Lower Waddell at Marsh Trail.
Temporal Representation:	Started sampling and collecting information on September 24, 2002. We completed the sampling and collection on October 7, 2003.
Environmental Conditions:	
QAPP Information:	All sampling, collection and analysis followed the Regional Board's Central Coast Ambient Monitoring Program's (CCAMP) Quality Assurance Plan.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Cachuma, Lake**
Water Body ID: **CAL31451065199808051015 08**
Water Body Type: **Lake & Reservoir**

DECISION ID **47023** **Region 3**
Cachuma, Lake

Pollutant: **Aldrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47023, Aldrin **Region 3**
Cachuma, Lake

LOE ID: 53766

Pollutant: Aldrin
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47023, Aldrin **Region 3**

Cachuma, Lake

LOE ID:	53765
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47024**	**Region 3**
Cachuma, Lake		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances, nor did it exceed the OEHHA Fish Contaminant Goal (Klasing, S., and R. Brodberg, 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47024, Chlordane **Region 3**

Cachuma, Lake

LOE ID:	53770
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring

	Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47024, Chlordane **Region 3**

Cachuma, Lake

LOE ID:	53771
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47024, Chlordane **Region 3**

Cachuma, Lake

LOE ID:	53772
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47030**	**Region 3**
Cachuma, Lake		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances, nor did it exceed the OEHHA Fish Contaminant Goal (Klasing, S., and R. Brodberg, 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47030, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Cachuma, Lake

LOE ID:	53764
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates:

	April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47030, DDT (Dichlorodiphenyltrichloroethane) Region 3

Cachuma, Lake

LOE ID:	53763
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47030, DDT (Dichlorodiphenyltrichloroethane) Region 3

Cachuma, Lake

LOE ID:	53762
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47025**	**Region 3**
Cachuma, Lake		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances. The single sample could not be used to evaluate exceedance of the OEHHA Fish Contaminant Goal (Klasing, S., and R. Brodberg, 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a

beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47025, Dieldrin **Region 3**

Cachuma, Lake

LOE ID:	53774
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47025, Dieldrin **Region 3**

Cachuma, Lake

LOE ID:	53775
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Dieldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47025, Dieldrin **Region 3**

Cachuma, Lake

LOE ID:	53773
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	47026	Region 3
Cachuma, Lake		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances, nor did it exceed the OEHHA Fish Contaminant Goal (Klasing, S., and R. Brodberg, 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47026, Endrin **Region 3**

Cachuma, Lake

LOE ID:	53776
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in

	the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47026, Endrin **Region 3**

Cachuma, Lake

LOE ID:	53777
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were

	collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47026, Endrin **Region 3**

Cachuma, Lake

LOE ID:	53778
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **47032** **Region 3**

Cachuma, Lake

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47032, Heptachlor **Region 3**

Cachuma, Lake

LOE ID:	53747
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47032, Heptachlor **Region 3**

Cachuma, Lake

LOE ID:	53748
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus

appendices and attachments

DECISION ID	47027	Region 3
Cachuma, Lake		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances. The single sample could not be used to evaluate exceedance of the OEHHA Fish Contaminant Goal (Klasing, S., and R. Brodberg, 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47027, Heptachlor epoxide	**Region 3**
Cachuma, Lake	

LOE ID:	53749
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47027, Heptachlor epoxide **Region 3**

Cachuma, Lake

LOE ID:	53750
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47027, Heptachlor epoxide **Region 3**

Cachuma, Lake

LOE ID:	53751
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47033**	**Region 3**
Cachuma, Lake		

Pollutant: **Hexachlorobenzene/ HCB**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the OEHHA Fish Contaminant Goal (Klasing, S., and R. Brodberg, 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47033, Hexachlorobenzene/ HCB **Region 3**

Cachuma, Lake

LOE ID:	53752
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47028**	**Region 3**
Cachuma, Lake		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances, nor did it exceed the OEHHA Fish Contaminant Goal (Klasing, S., and R. Brodberg, 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two

exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47028, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Cachuma, Lake

LOE ID:	53753
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47028, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Cachuma, Lake

LOE ID:	53755
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47028, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Cachuma, Lake

LOE ID:	53754
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47035**	**Region 3**
Cachuma, Lake		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample could not be used to evaluate exceedance of the evaluation guideline (OEHHA Fish Contaminant Goal, Klasing, S., and R. Brodberg, 2008) set to protect human health when consuming fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample could not be used to evaluate exceedance of the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47035, Mirex **Region 3**

Cachuma, Lake

LOE ID:	53757
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.

Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **47029** **Region 3**

Cachuma, Lake

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances, nor did it exceed the OEHHA Fish Contaminant Goal (Klasing, S., and R. Brodberg, 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47029, PCBs (Polychlorinated biphenyls) **Region 3**

Cachuma, Lake

LOE ID:	53760
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).

QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47029, PCBs (Polychlorinated biphenyls) **Region 3**

Cachuma, Lake

LOE ID:	53759
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods

QAPP Information Reference(s):	described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47029, PCBs (Polychlorinated biphenyls) **Region 3**

Cachuma, Lake

LOE ID:	53758
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).

Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID 47036 Region 3

Cachuma, Lake

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (OEHHA Fish Contaminant Goal, Klasing, S., and R. Brodberg, 2008) set to protect human health when consuming fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47036, Selenium Region 3

Cachuma, Lake

LOE ID:	53761
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47031**	**Region 3**
Cachuma, Lake		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline (National Academy of Science, 1972) used for protection of aquatic life from bioaccumulation of toxic substances, nor did it exceed the OEHHA Fish Contaminant Goal (Klasing, S., and R. Brodberg, 2008). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47031, alpha-Endosulfan (Endosulfan 1) **Region 3**

Cachuma, Lake

LOE ID:	53767
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report

	on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47031, alpha-Endosulfan (Endosulfan 1) **Region 3**

Cachuma, Lake

LOE ID:	53769
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 47031, alpha-Endosulfan (Endosulfan 1) **Region 3**

Cachuma, Lake

LOE ID:	53768
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year

	Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47034**	**Region 3**
Cachuma, Lake		

Pollutant:	**Mercury**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. All five samples

exceed the evaluation guideline (USEPA, 2001) set to protect human health when consuming fish.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All five samples exceed the evaluation guideline (USEPA, 2001) set to protect human health when consuming fish and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47034, Mercury **Region 3**

Cachuma, Lake

LOE ID:	53756
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	5
Number of Exceedances:	5
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Cachuma, Lake to determine beneficial use support and results are as follows: 5 of 5 samples exceed the criterion for Mercury. Composites were generated from largemouth bass (28 composites - 1 fish per composite) and common carp (3 composites â€“ 5 fish per composite) for 3 locations. The composites were averaged for each species per location. One composite for largemouth bass and 3 composites for common carp could not be used in the assessment due to total fish lengths that did not fall within lengths noted in the guideline. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Cachuma, Lake was collected at 1 monitoring site [Lake Cachuma - 314PLC191]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/8/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Betteravia Lakes**
Water Body ID: **CAL3121003020041207182102**
Water Body Type: **Lake & Reservoir**

DECISION ID **32570** **Region 3**
Betteravia Lakes

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia (Decision 4658) and total ammonia (Decision 10966). This decision contains all of the LOEs from those decisions in addition to new LOEs.

Four lines of evidence are available in the administrative record to assess this pollutant. Three of these LOEs summarize unionized ammonia data and two aquatic life beneficial uses. Two of the five samples exceed the Basin Plan general objective for unionized ammonia set to protect aquatic life. One LOE summarizes total ammonia data and zero of the 9 total ammonia samples exceeded the water quality objective for drinking water. Although the samples were not taken at a location that is representative of this water body and should not be used alone to determine beneficial use impairment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used does not satisfy the data quantity requirements of section 6.1.5.2 of the Policy. Samples were collected on a culvert adjacent to Black Road and do not represent the water quality of Betteravia Lake.
3. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met

Regional Board Staff Decision Recommendation:

No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 32570, Ammonia **Region 3**
Betteravia Lakes

LOE ID:	9705
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road].
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32570, Ammonia **Region 3**

Betteravia Lakes

LOE ID:	701
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	From new listing proposal: Regional Board staff is proposing that multiple waterbodies (including Santa Maria River) within the Santa Maria watershed be listed for unionized ammonia. The impairment is evidenced by levels of unionized ammonia greater than the general numeric water quality objective of 0.025 mg/l. The Regional Board assessed CCAMP data and results are as follows for one site on the Betteravia Lakes: 2 of 6 data points exceed the criterion. However, the Regional Board has retracted the request to list the Betteravia Lakes based on the fact that "further investigation into the site (312OLA) lead to the conclusion that the data is not representative of true environmental conditions." (12/15/04) A map showing the sampling location confirms that the original request to list was in error.(CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	WQO = 0.025 mg/l
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data were collected at site 312OLA on the a culvert adjacent to Black Road, in Santa Barbara County
Temporal Representation:	
Environmental Conditions:	"The samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes." taken from an email from Lisa McCann.
QAPP Information:	CCAMP, SWAMP.Samples were taken according to CCAMP protocols.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32570, Ammonia **Region 3**

Betteravia Lakes

LOE ID:	9706
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 2 of 5 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32570, Ammonia **Region 3**

Betteravia Lakes

LOE ID:	9703
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 0 of 9 samples exceed the criterion for Ammonia as N, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	41494	Region 3
Betteravia Lakes		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 9 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. However, the samples were not taken at a location that is representative of this water body and should not be used alone to determine beneficial use impairment. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 9 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41494, Chlorophyll-a	**Region 3**
Betteravia Lakes	

LOE ID:	9796
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41494, Chlorophyll-a **Region 3**

Betteravia Lakes

LOE ID:	9704
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 2 of 9 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36691**	**Region 3**
Betteravia Lakes		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Six of 8 samples exceeded the water quality objective for Water Contact Recreation. Only 1 of 8 exceeded the

objective for Non-contact Recreation. However, the samples were not taken at a location that is representative of this water body and should not be used alone to determine beneficial use impairment.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 8 samples exceeded the water quality objective for Water Contact Recreation and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. However, the samples were not taken at a location that is representative of this water body and should not be used alone to determine beneficial use impairment.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the samples were not taken at a location that is representative of this water body and the readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 36691, Fecal Coliform **Region 3**

Betteravia Lakes

LOE ID:	10713
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 6 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36691, Fecal Coliform **Region 3**

Betteravia Lakes

LOE ID:	10728
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 1 of 8 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

submission. All data are flagged as appropriate.

QAPP Information Reference(s):

DECISION ID	33696	Region 3
Betteravia Lakes		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name was changed from 'Nitrate as NO3' to 'Nitrate'. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 9 samples exceed the Municipal & Domestic Supply objective; however, the samples were not taken from a location that is representative of this waterbody and therefore will not be used alone as the basis of a listing decision. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used does not satisfy the data quantity requirements of section 6.1.5.2 of the Policy. Samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lake. 3. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33696, Nitrate	**Region 3**
Betteravia Lakes	

LOE ID:	702
Pollutant:	Nitrate as Nitrate (NO3)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Six out of nine samples exceeded the water quality objective for nitrate (as NO3) for municipal and domestic supply (CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. (Region 3 Basin Plan, p III-3; In Table 3-2, the MCL for Nitrate (as NO3) in Domestic or Municipal Supply is 45 mg/L).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from one site on a culvert adjacent to Black Road.
Temporal Representation:	Samples were collected from January 2000 to February 2001.
Environmental Conditions:	The waterbody is located in the Santa Maria hydrologic unit, Guadalupe hydrologic subarea. "The samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes." taken from email from Lisa McCann.
QAPP Information:	CCAMP, SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33696, Nitrate **Region 3**

Betteravia Lakes

LOE ID:	9797
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	9
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 6 of 9 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 1/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42991	Region 3
Betteravia Lakes		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 7 samples exceed the Cold Freshwater Habitat water quality objective. None of the 7 samples exceed the Warm Freshwater Habitat objective. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four lines of evidence are available in the administrative record to assess this pollutant. One of the 7 samples exceed the Cold Freshwater Habitat water quality objective. None of the 7 samples exceed the Warm Freshwater Habitat objective. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42991, Oxygen, Dissolved **Region 3**

Betteravia Lakes

LOE ID:	13535
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42991, Oxygen, Dissolved **Region 3**

Betteravia Lakes

LOE ID:	13534
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	7

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42991, Oxygen, Dissolved **Region 3**

Betteravia Lakes

LOE ID:	13521
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced

below 7.0 mg/l at any time.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]

Temporal Representation: Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 42991, Oxygen, Dissolved **Region 3**

Betteravia Lakes

LOE ID: 13536

Pollutant: Dissolved oxygen saturation
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 7
Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Oxygen, Saturation.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]

Temporal Representation: Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 36636 **Region 3**

Betteravia Lakes

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Two of the 6 samples exceed the Evaluation Guideline set for protection of Cold Freshwater Habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 6 samples exceed the Evaluation Guideline set for protection of Cold Freshwater Habitat and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36636, Temperature, water **Region 3**

Betteravia Lakes

LOE ID:	13537
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41423	Region 3
Betteravia Lakes		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the 3 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 3 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41423, Turbidity **Region 3**

Betteravia Lakes

LOE ID:	13553
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41423, Turbidity **Region 3**

Betteravia Lakes

LOE ID:	13538

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 4/12/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment. .
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**36862**	**Region 3**
Betteravia Lakes		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. None of the six samples exceed the Cold and Warm Freshwater Habitat water quality objectives, Municipal & Domestic Supply objective, Non-Contact Recreation objective or Water Contact Recreation objective. However, the samples were not taken at a location that is representative of this water body and should not be used alone to determine beneficial use impairment. Additionally, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the six samples exceed the Cold and Warm Freshwater Habitat water quality objectives, Municipal & Domestic Supply objective, Non-Contact Recreation objective or Water Contact Recreation objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36862, pH **Region 3**

Betteravia Lakes

LOE ID:	11699
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36862, pH **Region 3**

Betteravia Lakes

LOE ID:	11698
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36862, pH **Region 3**

Betteravia Lakes

LOE ID:	11697
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	These samples were collected on a culvert adjacent to Black Road and do not represent the water quality on Betteravia Lakes and therefore should not be used alone to determine beneficial use impairment.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36862, pH **Region 3**

Betteravia Lakes

LOE ID:	11659
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36862, pH **Region 3**

Betteravia Lakes

LOE ID:	11700
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Betteravia Lakes to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Betteravia Lakes was collected at 1 monitoring site [312OLA-Betteravia Lakes at Black Road]
Temporal Representation:	Data was collected over the time period 2/3/2000-2/28/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Oso Flaco Lake**
Water Body ID: **CAL3121003020011121102545**
Water Body Type: **Lake & Reservoir**

DECISION ID	33369	Region 3
Oso Flaco Lake		

Pollutant: **Dieldrin**
Final Listing Decision: **Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Agriculture
TMDL Name: Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code: 1081
Date TMDL Approved by USEPA: 08/31/2015
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Six of the six fish tissue samples exceeded the evaluation guideline for consumption of fish. One of three fish tissue samples and zero of the two sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the six fish tissue samples exceeded the evaluation guideline for consumption of fish and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result

in attainment of the standard.

Line of Evidence (LOE) for Decision ID 33369, Dieldrin **Region 3**

Oso Flaco Lake

LOE ID:	55965
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 33369, Dieldrin **Region 3**

Oso Flaco Lake

LOE ID:	77327
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Dieldrin. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 33369, Dieldrin **Region 3**

Oso Flaco Lake

LOE ID:	77328
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for Dieldrin. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 33369, Dieldrin **Region 3**

Oso Flaco Lake

LOE ID:	700

Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Three out of 3 samples exceeded (TSMP, 2002). A total of 2 filet composite samples of bluegill and one filet composite of hitch were collected. Bluegill were collected from 1993. Hitch were collected 2001. The guideline was exceeded in all samples.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast RWQCB Basin Plan: No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	2 ng/g (OEHHA Screening Value) (Brodberg & Pollock, 1999).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station located in lake at foot of Oso Flaco Road.
Temporal Representation:	Samples were collected 1993 and 2001.
Environmental Conditions:	
QAPP Information:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game.
QAPP Information Reference(s):	

DECISION ID	**43630**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.1 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess pollutant. Twenty-eight of the 28 samples exceed the evaluation guideline for Warm Freshwater Habitats (Central Coast Region NNE Technical Report, 2010). LOE summarizes evidence of eutrophic condition and staff provide the following supporting evidence of eutrophication in this water segment: 1. Oso Flaco Lake has been added to the 303(d) List for low dissolved oxygen. Dissolved oxygen for water body ranged from 5.84 mg/L to 18.86 mg/L, frequently exceeding (falling below) the Spawning Habitat water quality objective of 7.0 mg/L. In addition, this waterbody at times exceeds the upper

dissolved oxygen screening level of 13.0 mg/L (R3 NNE Technical Report, 2010).
2. Based on predicted algae biomass, the California Benthic Biomass Tool, v. 13 (Tetratech, 2007) estimated an oxygen deficit for this water body of 2.98 mg/L. The level established by Central Coast staff as providing an acceptable level of protection for Central Coast waters is a maximum of 1.25 mg/L (RWQCB NNE Technical Approach, 2009).
3. Water column chlorophyll a concentrations averaged 36.57 and peaked at 96.00 ug/L often exceeding the screening level for chlorophyll a, which is 15 ug/L. Oso Flaco Lake is also on the CWA section 303(d) List due to elevated chlorophyll a concentrations..
4. Staff have documented nuisance condition from emergent vegetation and algal cover in this water body See photos in LOE 29747.

There is evidence of a eutrophic condition related to over growth of aquatic vegetation, algae and wide swings in dissolved oxygen levels in the lake caused (at least in part) by the high levels of nutrients, specifically nitrate, in the lake. This vegetation not only contributes to wide swings in dissolved oxygen levels but also prevents recreational use of the lake (i.e. fishing).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-eight of the 28 samples exceed the evaluation guidelines for Cold and Warm Freshwater Habitats and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. There is supporting evidence of eutrophic conditions including wide swings in dissolved oxygen and Oso Flaco Lake is on the CWA section 303(d) List for both low dissolved oxygen and chlorophyll a.
5.Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 43630, Nitrate **Region 3**

Oso Flaco Lake

LOE ID:	29747
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Preservation of Rare & Endangered Species | Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	CCAMP data collected monthly in Oso Flaco Lake between January 2000 and January 2001 show elevated Nitrate levels which likely contributed to the elevated chlorophyll a concentrations in the water column, wide swings in Dissolved Oxygen concentrations and pH levels. Photo documentation also shows nuisance aquatic vegetation and algae filling the lake in summer months. Nitrate ranged from 28.0 - 31.7 mg/L in monthly grab samples taken from the lake. Dissolved Oxygen measurements (including both monthly grab samples and a single summer time pre-dawn sampling event) ranged from 5.05 mg/L to 21.0 mg/L. This indicates not only depressed but also super saturated oxygen conditions. Chlorophyll a measurements ranged between <1.0 ug/L and 160 ug/L. Three of these measurements were above 40 ug/L, the evaluation guideline used in this assessment.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3 Oso Flaco Lake vegetation photo Oso Flaco Lake aquatic vegetation nuisance condition
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Monthly grab samples collected at the culvert between Oso Flaco Lake and Little Oso Flaco Lake (312OFL).
Temporal Representation:	Samples were collected by CCAMP staff between January 2000 and Febuary 2001.
Environmental Conditions:	Measurements were taken and samples were collected from the down stream side of the culvert between the two lakes. Instream vegetation and algae are very dense in summer months.
QAPP Information:	CCAMP data is collected following the SWAMP QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 43630, Nitrate **Region 3**

Oso Flaco Lake

LOE ID:	50905
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43630, Nitrate **Region 3**

Oso Flaco Lake

LOE ID:	50904
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 43630, Nitrate **Region 3**

Oso Flaco Lake

LOE ID:	81184
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	16
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	All sixteen samples exceed the evaluation guideline. For these samples, nitrate concentrations ranged from 28.0 - 37.1 mg/L as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Central Coast Region Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data are collected from one station, 312OFL - Oso Flaco Lake at culverts.
Temporal Representation:	Samples were collected between January 2000 and March 2001.
Environmental Conditions:	none
QAPP Information:	SWAMP QAPP
QAPP Information Reference(s):	

DECISION ID **48993** **Region 3**

Oso Flaco Lake

Pollutant:	**Aldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.5 of the Listing Policy. Under section 3.5, one line of evidence is necessary to assess listing status in tissue samples. One line of evidence is available in the administrative record to assess this pollutant. Zero of the three fish tissue samples exceeded the evaluation guideline for consumption of fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three fish tissue samples exceed the evaluation guideline for consumption of fish and this does not exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48993, Aldrin **Region 3**

Oso Flaco Lake

LOE ID:	77316
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Aldrin. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**41287**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 samples exceed the water quality objective for unionized ammonia set to protect aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 24 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41287, Ammonia **Region 3**

Oso Flaco Lake

LOE ID:	50902
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41287, Ammonia **Region 3**

Oso Flaco Lake

LOE ID:	9673

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48922**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Azinphos-methyl (Guthion)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the

use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48922, Azinphos-methyl (Guthion) **Region 3**

Oso Flaco Lake

LOE ID:	55895
Pollutant:	Azinphos-methyl (Guthion)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Azinphos Methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Azinphos methyl (Guthion) criteria for the protection of freshwater aquatic life is 0.01 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48935	Region 3
Oso Flaco Lake		

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. Zero of the two sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48935, Bifenthrin	**Region 3**
Oso Flaco Lake	

LOE ID:	55897
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Bifenthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48935, Bifenthrin **Region 3**

Oso Flaco Lake

LOE ID:	55896
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Bifenthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA.

	Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48948**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. One of the three fish tissue samples exceeded the evaluation guideline for consumption of fish but zero of the three fish tissue samples exceeded the aquatic life protection evaluation guideline. In addition, Zero of the two sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the three fish tissue samples exceeded the evaluation guideline for consumption of fish but zero of the three fish tissue samples and zero of the two sediment samples exceeded the aquatic life protection evaluation guideline. None of these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48948, Chlordane — Region 3

Oso Flaco Lake

LOE ID:	55904
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Chlordane is 17.6 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48948, Chlordane — Region 3

Oso Flaco Lake

LOE ID:	77321
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	1

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Chlordane, Total. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 48948, Chlordane **Region 3**

Oso Flaco Lake

LOE ID:	77320
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlordane, Total. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **41261** **Region 3**

Oso Flaco Lake

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1, 3.5, and 3.6 of the Listing Policy. Under sections 3.1 and 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. Zero out of two sediment samples exceeded the evaluation guideline. Three sediment samples (pore water) were collected but are not counted in the assessment because the laboratory method detection limit was above the guideline and the results were non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. Additionally, there is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision. One water sample exceeded the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). Six samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample exceeded the evaluation guideline while no tissue or sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41261, Chlorpyrifos — Region 3

Oso Flaco Lake

LOE ID:	55914
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos. One composite (3 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 41261, Chlorpyrifos **Region 3**

Oso Flaco Lake

LOE ID:	55913

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek to determine beneficial use support and results are as follows: None of the samples exceed the criterion for Chlorpyrifos. Six samples (quantified as either non-detect or detected but not quantified) were not used in this assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41261, Chlorpyrifos **Region 3**

Oso Flaco Lake

LOE ID:	55921
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Creek. Three sample were

	collected but are not counted in the assessment because the laboratory method detection limit was above the guideline and the results were non-detect. Therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 1/16/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41261, Chlorpyrifos **Region 3**

Oso Flaco Lake

LOE ID:	55912
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely

	affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41261, Chlorpyrifos **Region 3**

Oso Flaco Lake

LOE ID:	16297
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **48937** **Region 3**

Oso Flaco Lake

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did exceed the evaluation guideline for aquatic life protection. Zero of the two sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single water sample exceeded the evaluation guideline but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48937, Cyfluthrin **Region 3**

Oso Flaco Lake

LOE ID:	55922
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cyfluthrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48937, Cyfluthrin **Region 3**

Oso Flaco Lake

LOE ID:	55923
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Cyfluthrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of cyfluthrin does not exceed 0.00005 ug/L and if the 1-h average concentration does not exceed 0.0003 ug/L. For this assessment the 4-day average guideline was used. Mixtures of cyfluthrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)Â
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48938**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. Zero of the two sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48938, Cyhalothrin, Lambda **Region 3**

Oso Flaco Lake

LOE ID:	55924
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cyhalothrin, Lambda, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48938, Cyhalothrin, Lambda **Region 3**

Oso Flaco Lake

LOE ID:	55932
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cyhalothrin, lambda, total. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	48939	Region 3
Oso Flaco Lake		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection (Note,the single water sample result was not used in the assessment because the result was reported a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified.). Zero of the two sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though

this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48939, Cypermethrin **Region 3**

Oso Flaco Lake

LOE ID:	55933
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Cypermethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48939, Cypermethrin **Region 3**

Oso Flaco Lake

LOE ID:	55934
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cypermethrin. The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **49029** **Region 3**

Oso Flaco Lake

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49029, DDD (Dichlorodiphenyldichloroethane) **Region 3**

Oso Flaco Lake

LOE ID:	55935
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDD.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**49030**	**Region 3**
Oso Flaco Lake		

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Two of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. Sediment toxicity data is available for the Lake but only one of the two samples resulted in a significant toxic effect to the test organisms. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. Additional chemistry samples for DDE paired with toxicity analyses for those sediment samples is needed. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the two samples exceed the evaluation guideline (MacDonald et al. 2000) used to interpret the narrative water quality objective for aquatic life protection. Sediment toxicity data is available for the Lake but only one of the two samples resulted in a significant toxic effect to the test organisms. Although the chemistry sample count does exceed the allowable frequency listed in Table 3.1 of the Listing Policy, the sediment toxicity data does not support listing this water segment for DDE. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49030, DDE (Dichlorodiphenyldichloroethylene) Region 3

Oso Flaco Lake

LOE ID:	55942
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDE.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 49030, DDE (Dichlorodiphenyldichloroethylene) Region 3

Oso Flaco Lake

LOE ID:	55947
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects to survival of Hyalella azteca were reported for one sample, collected on 12/3/2008, at Oso Flaco Lake (312OFL).
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at site 312OFL - Oso Flaco Lake at culverts.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48950**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. Zero of the two sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48950, Deltamethrin **Region 3**

Oso Flaco Lake

LOE ID:	55945
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Deltamethrin. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48950, Deltamethrin **Region 3**

Oso Flaco Lake

LOE ID:	55944
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Deltamethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48984**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A

minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48984, Demeton **Region 3**

Oso Flaco Lake

LOE ID:	55952
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Demeton. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	41275	Region 3
Oso Flaco Lake		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1, 3.5, and 3.6 of the Listing Policy. Under sections 3.1 and 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. Zero out of seven water samples did not exceed the evaluation guideline (Siepmann and Finlayson, 2000). Zero out of two sediment samples exceeded the evaluation guideline. Zero of three sediment samples (pore water) exceeded the evaluation guideline. There is no chlorpyrifos evaluation guideline specific to "sediment, interstitial water" (pore water). LOEs summarizing pore water results will not be the sole basis for any decision.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the sample size is insufficient to determine with the power and confidence of the Listing Policy if water quality standards are being met.

Line of Evidence (LOE) for Decision ID 41275, Diazinon	**Region 3**
Oso Flaco Lake	

LOE ID:	55963
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	There is no diazinon evaluation guideline specific to "sediment, interstitial water" (pore water). The following evaluation guideline was used to evaluate an exceedance in water quality standards: the freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004). LOEs summarizing pore water results will not be the sole basis for any decision.
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 1/16/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41275, Diazinon **Region 3**

Oso Flaco Lake

LOE ID:	55955
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. One composite (3 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report

	on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in fish tissue is 1,500 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 41275, Diazinon **Region 3**

Oso Flaco Lake

LOE ID:	55954
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Diazinon. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 10/21/2008-8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41275, Diazinon **Region 3**

Oso Flaco Lake

LOE ID:	55953
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41275, Diazinon **Region 3**

Oso Flaco Lake

LOE ID:	16720
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **48923** **Region 3**

Oso Flaco Lake

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48923, Dichlorvos **Region 3**

Oso Flaco Lake

LOE ID:	55964
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dichlorvos. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives

	for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48924**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48924, Dimethoate **Region 3**

Oso Flaco Lake

LOE ID:	55975
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dimethoate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48958** **Region 3**

Oso Flaco Lake

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. Zero of the two sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48958, Esfenvalerate/Fenvalerate **Region 3**

Oso Flaco Lake

LOE ID:	55994
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Esfenvalerate/Fenvalerate.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment

	sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48958, Esfenvalerate/Fenvalerate **Region 3**

Oso Flaco Lake

LOE ID:	55995
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Fenvalerate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48928** **Region 3**

Oso Flaco Lake

Pollutant:	**Ethion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for consumption of fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48928, Ethion **Region 3**

Oso Flaco Lake

LOE ID:	55997
Pollutant:	Ethion
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethion. One composite (3 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for ethion in fish tissue is 1,100 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**48927**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48927, Ethoprop **Region 3**

Oso Flaco Lake

LOE ID:	55863
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ethoprop. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]

Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49017 Region 3

Oso Flaco Lake

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.5 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. One line of evidence is available in the administrative record to assess this pollutant. Zero of the three fish tissue samples exceeded the evaluation guideline for consumption of fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three fish tissue samples exceed the evaluation guideline for consumption of fish and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49017, Heptachlor Region 3

Oso Flaco Lake

LOE ID:	77310
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Heptachlor. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**49021**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.5 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three fish tissue samples exceed the evaluation guideline for warm freshwater habitats but one of three samples exceed the evaluation guideline for consumption of fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three fish tissue samples exceed the evaluation guideline for warm freshwater habitats but one of three samples exceed the evaluation guideline for consumption of fish. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49021, Heptachlor epoxide **Region 3**

Oso Flaco Lake

LOE ID:	77311
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Heptachlor epoxide. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey

	Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 49021, Heptachlor epoxide **Region 3**

Oso Flaco Lake

LOE ID:	77312
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Heptachlor epoxide. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring

	Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**49023**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.5 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. One line of evidence is available in the administrative record to assess this pollutant. One of the three fish tissue samples exceeded the evaluation guideline for consumption of fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported

and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the three fish tissue samples exceed the evaluation guideline for consumption of fish and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49023, Hexachlorobenzene/ HCB **Region 3**

Oso Flaco Lake

LOE ID:	77313
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Hexachlorobenzene. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8

	ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**48952**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1, 3.5 and 3.6 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the three fish tissue samples exceeded the evaluation guideline for consumption of fish. Zero of the three fish tissue samples and zero of the two sediment samples exceeds the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the samples exceeded the aquatic life protection evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48952, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Oso Flaco Lake

LOE ID:	77314
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for HCH, gamma. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample

	locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 48952, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Oso Flaco Lake

LOE ID:	77315
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for HCH, gamma. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.

Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 48952, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Oso Flaco Lake

LOE ID:	55873
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for Lindane (gamma-HCH) is 4.99 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31

Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48926 Region 3

Oso Flaco Lake

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did exceed the evaluation guidelines but this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48926, Malathion Region 3

Oso Flaco Lake

LOE ID:	55884
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Malathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48930**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable

frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48930, Methidathion **Region 3**

Oso Flaco Lake

LOE ID:	55889
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Methidathion. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48940** **Region 3**

Oso Flaco Lake

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. Zero of the two sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48940, Methyl Parathion **Region 3**

Oso Flaco Lake

LOE ID:	55890
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Methyl Parathion.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring

	Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48940, Methyl Parathion **Region 3**

Oso Flaco Lake

LOE ID:	55898
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, methyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River

System

Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 49026 Region 3

Oso Flaco Lake

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.5 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. One line of evidence is available in the administrative record to assess this pollutant. Zero of the zero fish tissue samples exceeded the evaluation guideline for consumption of fish. Note, sample results were not used in the assessment because the result was reported a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified.This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the zero fish tissue samples exceed the evaluation guideline for consumption of fish and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49026, Mirex Region 3

Oso Flaco Lake

LOE ID:	77319
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Four composites were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	49028	Region 3
Oso Flaco Lake		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.5 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline for consumption of fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline for consumption of fish and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49028, PAHs (Polycyclic Aromatic Hydrocarbons)	**Region 3**
Oso Flaco Lake	

LOE ID:	55899
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total. One composite (3 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year

	Screening Study" (SWAMP, 2009). PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in fish tissue is 0.7 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**48953**	**Region 3**
Oso Flaco Lake		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1, 3.5 and 3.6 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. One of the three fish tissue samples exceeded the evaluation guideline for consumption of fish. Zero of the three fish tissue samples and zero of the two sediment samples exceeds the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against of placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the three fish tissue samples exceeds the evaluation guideline for consumption of fish and zero of the samples exceeded the aquatic life protection evaluation guideline and these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48953, PCBs (Polychlorinated biphenyls) **Region 3**

Oso Flaco Lake

LOE ID:	55906
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PCB, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which

	produce detrimental physiological responses in, human, plant, animal, or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of PCBs is 676 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48953, PCBs (Polychlorinated biphenyls) Region 3

Oso Flaco Lake

LOE ID:	77323
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for PCB, Total. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption

	rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 48953, PCBs (Polychlorinated biphenyls) **Region 3**

Oso Flaco Lake

LOE ID:	77322
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for PCB, Total. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**48931**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48931, Parathion **Region 3**

Oso Flaco Lake

LOE ID:	55905
Pollutant:	Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Parathion, Ethyl. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The criterion continuous concentration for Parathion, Ethyl is 0.013 ug/l from the National Recommended Water Quality Criteria. Parathion is synonymous with diethyl parathion and parathion-ethyl
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **48942** **Region 3**

Oso Flaco Lake

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 at one line of evidence are necessary to assess listing status but under section 3.6 at least two lines of evidence are necessary to assess listing status and the pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. The single water sample did not exceed the evaluation guideline for aquatic life protection. Note, the single water sample result was not used in the assessment because the result was reported a Â‘non detectÂ’ but the laboratory data reporting limit was above the objective and therefore the results could not be quantified. Zero of the two sediment samples exceed the evaluation guideline used to protect aquatic life beneficial uses. However, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that even though this water body is impaired for sediment toxicity these water body-pollutant combinations should not be placed on the section 303(d) list because applicable water quality standards for these pollutants are not being exceeded. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48942, Permethrin, total **Region 3**

Oso Flaco Lake

LOE ID:	55915
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Permethrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48942, Permethrin, total **Region 3**

Oso Flaco Lake

LOE ID:	55916
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: The single sample result was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. In this assessment, the 4-day value was used.

	Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 48932 Region 3

Oso Flaco Lake

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48932, Phorate Region 3

Oso Flaco Lake

LOE ID:	55925
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phorate. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**48934**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the evaluation guideline for aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48934, Phosmet **Region 3**

Oso Flaco Lake

LOE ID:	55926
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Phosmet. An arithmetic mean is calculated when replicates, such as field duplicates, are reported. If a non-detect is one of the results, then one half the reporting limit is used in this calculation.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected on a single day 8/26/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Sampling and analysis was conducted following the SWAMP QAPP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **49027** **Region 3**

Oso Flaco Lake

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.5 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. One line of evidence is available in the administrative record to assess this pollutant. Zero of the two fish tissue samples exceeded the evaluation guideline for consumption of fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the two fish tissue samples exceed the evaluation guideline for consumption of fish and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49027, Selenium **Region 3**

Oso Flaco Lake

LOE ID:	77324
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Selenium. Two composites (5 fish per composite) were generated from two species: 1 from goldfish and one from hitch. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report

	on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**41818**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 25 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 25 samples exceed the Warm Freshwater Habitat evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41818, Turbidity **Region 3**

Oso Flaco Lake

LOE ID:	50909
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41818, Turbidity **Region 3**

Oso Flaco Lake

LOE ID:	13445
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 4/10/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41818, Turbidity **Region 3**

Oso Flaco Lake

LOE ID:	13466
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed RWQCB3 - Central Coast Ambient Monitoring Program (Lakes) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 2 monitoring sites: 312OFL1b-Oso Flaco Lake Boardwalk at first alcove, and 312OFL2b-Oso Flaco Lake Boardwalk at second alcove. At each of the two locations, three different depth samples were collected consistent with section 6.1.5.6 of the Listing policy, the average turbidity measurement at each location was used for this assessment.
Temporal Representation:	Data was collected on two consecutive dates 9/7/2000-9/8/2000.
Environmental Conditions:	Oso Flaco Lake is no more than 4 feet deep at the two monitoring locations however temperature, salinity, dissolved oxygen and pH gradients were observed on the two sample dates.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41818, Turbidity **Region 3**

Oso Flaco Lake

LOE ID:	13463
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile

	salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**49018**	**Region 3**
Oso Flaco Lake		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.5 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the three fish tissue samples exceeded the evaluation guidelines for consumption of fish or for Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the three fish tissue samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49018, alpha-Endosulfan (Endosulfan 1)	**Region 3**
Oso Flaco Lake	

LOE ID:	77317

Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Endosulfan I. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 49018, alpha-Endosulfan (Endosulfan 1) Region 3

Oso Flaco Lake

LOE ID:	77318
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Endosulfan I. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).

QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	44520	Region 3
Oso Flaco Lake		

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. Three beneficial uses are assessed. Two of the 30 samples exceed the water quality objective for Warm Freshwater Habitats and for three of the 30 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 30 samples exceed the water quality objective for Warm Freshwater Habitats and for three of the 30 samples exceed the water quality objectives for Drinking Water and Recreation. These do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44520, pH	**Region 3**
Oso Flaco Lake	

LOE ID:	50898
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.

Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44520, pH **Region 3**

Oso Flaco Lake

LOE ID:	50900
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44520, pH — Region 3

Oso Flaco Lake

LOE ID:	50908
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44520, pH — Region 3

Oso Flaco Lake

LOE ID:	11625
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed RWQCB3 - Central Coast Ambient Monitoring Program (Lakes) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.

Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 2 monitoring sites: 312OFL1b-Oso Flaco Lake Boardwalk at first alcove, and 312OFL2b-Oso Flaco Lake Boardwalk at second alcove. At each of the two locations, three different depth samples were collected consistent with section 6.1.5.6 of the Listing policy, the highest pH measurement at each location was used for this assessment.
Temporal Representation:	Data was collected on two consecutive dates 9/7/2000-9/8/2000.
Environmental Conditions:	Oso Flaco Lake is no more than 4 feet deep at the two monitoring locations however temperature, salinity, dissolved oxygen and pH gradients were observed on the two sample dates.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44520, pH **Region 3**

Oso Flaco Lake

LOE ID:	11606
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]

Temporal Representation: Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44520, pH **Region 3**

Oso Flaco Lake

LOE ID: 11640

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 3

Number of Exceedances: 2

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed RWQCB3 - Central Coast Ambient Monitoring Program (Lakes) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: CCAMP Water Quality Data_file1
Final Data File used for assessment: CCAMP Water Quality Data_file2
Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Oso Flaco Lake was collected at 2 monitoring sites: 312OFL1b-Oso Flaco Lake Boardwalk at first alcove, and 312OFL2b-Oso Flaco Lake Boardwalk at second alcove. At each of the two locations, three different depth samples were collected consistent with section 6.1.5.6 of the Listing policy, the highest pH measurement at each location was used for this assessment.

Temporal Representation: Data was collected on two consecutive dates 9/7/2000-9/8/2000.

Environmental Conditions: Oso Flaco Lake is no more than 4 feet deep at the two monitoring locations however temperature, salinity, dissolved oxygen and pH gradients were observed on the two sample dates.

QAPP Information: All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44520, pH — Region 3

Oso Flaco Lake

LOE ID:	11605
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44520, pH — Region 3

Oso Flaco Lake

LOE ID:	11621
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44520, pH **Region 3**

Oso Flaco Lake

LOE ID:	11622
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44520, pH **Region 3**

Oso Flaco Lake

LOE ID:	11604
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 13 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44520, pH **Region 3**

Oso Flaco Lake

LOE ID:	11623
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44520, pH **Region 3**

Oso Flaco Lake

LOE ID:	11624
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed RWQCB3 - Central Coast Ambient Monitoring Program (Lakes) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 2 monitoring sites: 312OFL1b-Oso Flaco Lake Boardwalk at first alcove, and 312OFL2b-Oso Flaco Lake Boardwalk at second alcove. At each of the two locations, three different depth samples were collected consistent with section 6.1.5.6 of the Listing policy, the highest pH measurement at each location was used for this assessment.
Temporal Representation:	Data was collected on two consecutive dates 9/7/2000-9/8/2000.
Environmental Conditions:	Oso Flaco Lake is no more than 4 feet deep at the two monitoring locations however temperature, salinity, dissolved oxygen and pH gradients were observed on the two sample dates.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41333**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 27 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of the 27 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41333, Chlorophyll-a **Region 3**

Oso Flaco Lake

LOE ID:	9672
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 3 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41333, Chlorophyll-a **Region 3**

Oso Flaco Lake

LOE ID:	50903
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 3 of 11 samples exceed the criterion for Chlorophyll a.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **49025** **Region 3**

Oso Flaco Lake

Pollutant:	**Mercury**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final	New Decision

Listing Decision:	
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.5 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. Two lines of evidence are available in the administrative record to assess this pollutant. The California Office of Environmental Health Hazard Assessment has issued a fish consumption advisory due to mercury contamination in large mouth bass and one of the three fish tissue samples exceeded the evaluation guideline for consumption of fish. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.The California Office of Environmental Health Hazard Assessment has issued a fish consumption advisory due to mercury contamination in large mouth bass and therefore, in accordance with section 3.4 of the Listing Policy this water segment shall be placed on the section 303(d) List. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49025, Mercury **Region 3**

Oso Flaco Lake

LOE ID:	79348
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	None
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	The Office of Environmental Health Hazards Assessment has issued a fish consumption advisory has for Mercury in Oso Flaco Lake.
Data Reference:	Fish consumption advisory for Oso Flaco Lake.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be

	maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples were collected from Oso Flaco Lake
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49025, Mercury **Region 3**

Oso Flaco Lake

LOE ID:	55888
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Mercury. Composites were generated from largemouth bass (3 composites - 1 fish per composite), goldfish (2 composites - 5 fish per composite), and hitch (2 composites - 5 fish per composite). The composites were averaged for each species. The 1 sample for largemouth bass exceeded the criterion. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United

	States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**44251**	**Region 3**
Oso Flaco Lake		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Five of the 29 samples exceeded the water quality objectives for dissolved oxygen in Spawning Habitats. But, zero samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 29 samples exceeded the water quality objectives for dissolved oxygen in Spawning Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	79337
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	17
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 4 of 17 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	CCAMP water quality data -file #1 CCAMP water quality data -file #2 CCAMP water quality data -file #3
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 2/3/2000 - 3/1/2001.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	50906
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	50901
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Fish Spawning
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	50907
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 7 of 12 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	13464
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed RWQCB3 - Central Coast Ambient Monitoring Program (Lakes) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 2 monitoring sites: 312OFL1b-Oso Flaco Lake Boardwalk at first alcove, and 312OFL2b-Oso Flaco Lake Boardwalk at second alcove. At each of the two locations, three different depth samples were collected consistent with section 6.1.5.6 of the Listing policy, the lowest Dissolved Oxygen measurement at each location was used for this assessment.
Temporal Representation:	Data was collected on two consecutive dates 9/7/2000-9/8/2000.
Environmental Conditions:	Oso Flaco Lake is no more than 4 feet deep at the two monitoring locations however temperature, salinity, dissolved oxygen and pH gradients were observed on the two sample dates.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	13465
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Data for this line of evidence for Oso Flaco Lake was collected at 2 monitoring sites: 312OFL1b-Oso Flaco Lake Boardwalk at first alcove, and 312OFL2b-Oso Flaco Lake Boardwalk at second alcove. At each of the two locations, three different depth samples were collected consistent with section 6.1.5.6 of the Listing policy, the lowest Oxygen Saturation measurement at each location was used for this assessment.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 6 monitoring sites [312OFL1b-Oso Flaco Lake Boardwalk at first alcove, 312OFL1b-Oso Flaco Lake Boardwalk at first alcove, 312OFL1b-Oso Flaco Lake Boardwalk at first alcove, 312OFL2b-Oso Flaco Lake Boardwalk at second alcove, 312OFL2b-Oso Flaco Lake Boardwalk at second alcove, 312OFL2b-Oso Flaco Lake Boardwalk at second alcove]
Temporal Representation:	Data was collected on two consecutive dates 9/7/2000-9/8/2000.
Environmental Conditions:	Oso Flaco Lake is no more than 4 feet deep at the two monitoring locations however temperature, salinity, dissolved oxygen and pH gradients were observed on the two sample dates.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	13443
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	13446
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	13444

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 2/3/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44251, Oxygen, Dissolved **Region 3**

Oso Flaco Lake

LOE ID:	13462
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Oso Flaco Lake to determine beneficial use support and results are as follows:

	1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 6/27/2000-9/6/2000. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48954**	**Region 3**
Oso Flaco Lake		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1, 3.5 and 3.6 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Three of the three fish tissue samples exceeded the evaluation guideline for consumption of fish. One of the three fish tissue samples and zero of the two sediment samples exceeds the evaluation guidelines used to interpret the narrative water quality objective for aquatic life protection. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved

by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the three fish tissue samples exceeds the evaluation guideline for consumption of fish and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Santa Maria River pesticide and toxicity TMDL has been approved by the USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48954, DDT (Dichlorodiphenyltrichloroethane) Region 3

Oso Flaco Lake

LOE ID:	55943
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48954, DDT (Dichlorodiphenyltrichloroethane) Region 3

Oso Flaco Lake

LOE ID:	55927
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48954, DDT (Dichlorodiphenyltrichloroethane) Region 3

Oso Flaco Lake

LOE ID:	77325
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for DDT, Total. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 48954, DDT (Dichlorodiphenyltrichloroethane) Region 3

Oso Flaco Lake

LOE ID:	77326
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 3 of 3 samples exceed the criterion for DDT, Total. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**48951**	**Region 3**

Oso Flaco Lake

Pollutant:	**Endrin**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1, 3.5 and 3.6 of the Listing Policy. Under sections 3.1 and 3.5, one line of evidence is necessary to assess listing status in water and tissue samples. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the three fish tissue samples exceeded the evaluation guideline for consumption of fish. Two of the three fish tissue samples exceeded the aquatic life protection evaluation guideline. In addition, zero of the two sediment samples exceeds the evaluation guideline used to interpret the narrative water quality objective for aquatic life protection. These sample sizes are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) List in the Water Quality Limited Segments category. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the three fish tissue samples exceeded the aquatic life protection evaluation guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48951, Endrin — Region 3

Oso Flaco Lake

LOE ID:	77329
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Endrin. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 48951, Endrin **Region 3**

Oso Flaco Lake

LOE ID:	77330
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Endrin. Four composites (3-5 fish per composite) were generated from three species: 2 from goldfish, 1 from hitch, and 1 from largemouth bass. The goldfish composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312POF158]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 5/29/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus

appendices and attachments

Line of Evidence (LOE) for Decision ID 48951, Endrin **Region 3**

Oso Flaco Lake

LOE ID:	55985
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed TMDL Project Data data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin.
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [Oso Flaco Lake - 312OFL]
Temporal Representation:	Data was collected over the time period 12/3/2008-6/10/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The SWAMP QAPP (2008) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **47353** **Region 3**

Oso Flaco Lake

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Five of 12 samples exceed the evaluation standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986) set to protect for water contact recreation (i.e. swimming, wading etc.). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of 12 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2013. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47353, Escherichia coli (E. coli) **Region 3**

Oso Flaco Lake

LOE ID:	51164
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 5 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **41290** **Region 3**

Oso Flaco Lake

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Domestic Animals/Livestock | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for addition to the CWA section 303(d) List under sections 2.2, 3.2 and 3.3 of the Listing Policy. Under 3.3 of the Policy, a minimum of one line of evidence is needed to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Eight of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 27 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for adding this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eight of 27 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.)] and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL has been approved by USEPA on 04/24/2013. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41290, Fecal Coliform **Region 3**

Oso Flaco Lake

LOE ID:	51163
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41290, Fecal Coliform **Region 3**

Oso Flaco Lake

LOE ID:	50899
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Oso Flaco Lake to

	determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Santa Maria Rotation field data 2007-2008
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/31/2007-1/16/2008.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41290, Fecal Coliform **Region 3**

Oso Flaco Lake

LOE ID:	11603
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41290, Fecal Coliform **Region 3**

Oso Flaco Lake

LOE ID:	11602
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Santa Maria (SantaMaria) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected over the time period 1/12/2000-3/1/2001. Santa Maria watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	41496	Region 3
Oso Flaco Lake		

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

One LOE summarizes sediment samples. One of the three sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Five LOEs summarize water samples. One water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and seven water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eight total samples are available to assess toxic effects in water samples. Five of the eight water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the eight water samples resulted in a significant toxic effect to one or more test organisms for the water quality objective set for aquatic life protection. This exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on October 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41496, Toxicity **Region 3**

Oso Flaco Lake

LOE ID:	23955
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Pimephales promelas Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41496, Toxicity **Region 3**

Oso Flaco Lake

LOE ID:	23947
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Ceriodaphnia dubia Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41496, Toxicity **Region 3**

Oso Flaco Lake

LOE ID:	24627
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (04SW3001) data for Oso Flaco Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Oso Flaco Lake was collected at 1 monitoring site [312OFL-Oso Flaco Lake at culvert]
Temporal Representation:	Data was collected on a single day 2/28/2007. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41496, Toxicity **Region 3**

Oso Flaco Lake

LOE ID:	55947
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. One of the three samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects to survival of Hyalella azteca were reported for one sample, collected on 12/3/2008, at Oso Flaco Lake (312OFL).
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or

	that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected at site 312OFL - Oso Flaco Lake at culverts.
Temporal Representation:	The samples were collected in December of 2008 and March and June of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41496, Toxicity **Region 3**

Oso Flaco Lake

LOE ID:	55946
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Six samples were collected from Oso Flaco Lake to evaluate water toxicity. Three of the six samples exhibited significant toxicity. The toxicity tests included survival of Ceriodaphnia dubia. Statistically significant effects on Ceriodaphnia dubia were observed in three samples (10/21/2008, 12/3/2008, 03/31/2009).
Data Reference:	Data from Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control.
Guideline Reference:	
Spatial Representation:	The samples were collected atOso Flaco Lake.
Temporal Representation:	The samples were collected in October and December of 2008 and February, March, June and August of 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for Santa Maria River Watershed and Oso Flaco Creek Watershed TMDL Monitoring Study and analyzed at the Marine Pollution Studies Laboratory. Sampling and analysis was conducted following the SWAMP QAPrP 2008.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 41496, Toxicity **Region 3**

Oso Flaco Lake

LOE ID:	55936
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	One sample was collected to evaluate water toxicity. The sample exhibited significant toxicity to Ceriodaphnia dubia survival and reproduction. The toxicity test included survival and reproduction of Ceriodaphnia dubia, survival and biomass of Pimephales promelas, and total cell count of Selenastrum capricornutum. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location with the same lab sample id (if provided).
Data Reference:	Santa Maria Rotation 2007 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Region 3 Basin Plan.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity is defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. For SWAMP data exceedances are counted with the significant effect code SL. SL is defined as the result being significant compared to the negative control based on a statistical test, less than stated the alpha level, AND less than the evaluation threshold.
Guideline Reference:	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition. U.S. Environmental Protection Agency Office of Research and Development, Duluth, MI , U.S. Environmental Protection Agency Office of Water, Washington, DC EPA-600/R-99/064 SWAMP_Memo_Toxicity_Data_Intrepretation
Spatial Representation:	The sample was collected at station 312OFLxxx.
Temporal Representation:	The sample was collected in June 2007.
Environmental Conditions:	
QAPP Information:	The SWAMP QAPP (2002) was followed.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Soda Lake**
Water Body ID: **CAL3110005019980805102204**
Water Body Type: **Saline Lake**

DECISION ID **34028** **Region 3**
Soda Lake

Pollutant: **Ammonia**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Sources: Source Unknown
Expected TMDL Completion Date: 2023
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant unionized ammonia. This decision contains all of the LOEs from the original decision.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence (LOE) is available in the administrative record to assess this pollutant. One LOE summarize unionized ammonia data in which three of the 7 samples exceed the water quality objective for unionized ammonia set to protect aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 7 samples exceed the water quality objective for unionized ammonia and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34028, Ammonia **Region 3**
Soda Lake

LOE ID: 698

Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Three out of seven samples exceeded the general water quality objective (CCAMP, 2004; SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4)
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from two sites. Exceedances were detected in samples collected from both sites.
Temporal Representation:	Samples were collected from January 2000 to May 2000.
Environmental Conditions:	The water body is located in the Carrizo Plain hydrologic unit, Carrizo Plain hydrologic subarea. Sites are located at Soda Lake Northeast (311SLE) and Soda Lake Culverts at Seven Mile Road (311SLN).
QAPP Information:	CCAMP, SWAMP QAPP.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Lopez Lake**
Water Body ID: **CAL310310141998080411170 4**
Water Body Type: **Lake & Reservoir**

DECISION ID **51466** **Region 3**
Lopez Lake

Pollutant: **Aldrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51466, Aldrin **Region 3**
Lopez Lake

LOE ID: 54771

Pollutant: Aldrin
LOE Subgroup: Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51466, Aldrin **Region 3**

Lopez Lake

LOE ID:	54774

Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51469** **Region 3**

Lopez Lake

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51469, Chlordane **Region 3**

Lopez Lake

LOE ID:	54748
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51469, Chlordane **Region 3**

Lopez Lake

LOE ID:	54749
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51469, Chlordane **Region 3**

Lopez Lake

LOE ID:	54779
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51481**	**Region 3**
Lopez Lake		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51481, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Lopez Lake

LOE ID:	54777
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51481, DDT (Dichlorodiphenyltrichloroethane) Region 3

Lopez Lake

LOE ID:	54772
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of

	4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51481, DDT (Dichlorodiphenyltrichloroethane) Region 3

Lopez Lake

LOE ID:	54773
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: Sacramento sucker.

	Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51470**	**Region 3**
Lopez Lake		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single

fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline applied to protect for aquatic life beneficial uses but did exceed the evaluation guideline applied to protect for the commercial beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51470, Dieldrin **Region 3**

Lopez Lake

LOE ID:	54750
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51470, Dieldrin **Region 3**

Lopez Lake

LOE ID:	54752
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51470, Dieldrin **Region 3**

Lopez Lake

LOE ID:	54751
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008

	Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51471**	**Region 3**
Lopez Lake		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51471, Endrin **Region 3**

Lopez Lake

LOE ID:	54753
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington,

	D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51471, Endrin **Region 3**

Lopez Lake

LOE ID:	54755
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)

Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51471, Endrin **Region 3**

Lopez Lake

LOE ID:	54754
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51473**	**Region 3**
Lopez Lake		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51473, Heptachlor **Region 3**

Lopez Lake

LOE ID:	54757
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51473, Heptachlor **Region 3**

Lopez Lake

LOE ID:	54756
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs,

	Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51474**	**Region 3**
Lopez Lake		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51474, Heptachlor epoxide	**Region 3**
Lopez Lake	

LOE ID:	54758
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51474, Heptachlor epoxide **Region 3**

Lopez Lake

LOE ID:	54759
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51474, Heptachlor epoxide **Region 3**

Lopez Lake

LOE ID:	54760
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods

QAPP Information Reference(s):	described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51475** **Region 3**
Lopez Lake

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51475, Hexachlorobenzene/ HCB **Region 3**
Lopez Lake

LOE ID:	54761
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51476**	**Region 3**
Lopez Lake		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51476, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Lopez Lake

LOE ID:	54762
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51476, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Lopez Lake

LOE ID:	54763
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled:

	"Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51476, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Lopez Lake

LOE ID:	54764
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51477**	**Region 3**
Lopez Lake		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51477, Mercury **Region 3**

Lopez Lake

LOE ID:	54765
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Mercury. Composites were generated from largemouth bass (11 composites - 1 fish per composite) and Sacramento sucker (2 composites - 1 fish per composite). The composites were averaged for each species. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report

	on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51478**	**Region 3**
Lopez Lake		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51478, Mirex **Region 3**

Lopez Lake

LOE ID:	54766
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)

Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51479**	**Region 3**
Lopez Lake		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline applied to protect for aquatic life beneficial uses but did exceed the evaluation guideline applied to protect for the commercial beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51479, PCBs (Polychlorinated biphenyls) **Region 3**

Lopez Lake

LOE ID:	54768
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).

Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51479, PCBs (Polychlorinated biphenyls) **Region 3**

Lopez Lake

LOE ID:	54769
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations

	consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51479, PCBs (Polychlorinated biphenyls) **Region 3**

Lopez Lake

LOE ID:	54767
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency

Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51480**	**Region 3**
Lopez Lake		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51480, Selenium **Region 3**

Lopez Lake

LOE ID:	54770
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and

Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51467	Region 3
Lopez Lake		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51467, alpha-Endosulfan (Endosulfan 1)	**Region 3**
Lopez Lake	

LOE ID:	54776
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51467, alpha-Endosulfan (Endosulfan 1) **Region 3**

Lopez Lake

LOE ID:	54778
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51467, alpha-Endosulfan (Endosulfan 1) **Region 3**

Lopez Lake

LOE ID:	54775
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Lopez Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: Sacramento sucker. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Lopez Lake was collected at 1 monitoring site [Lopez Lake - 310PLL106]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Nacimiento Reservoir**
Water Body ID: **CAL3098200019981214171711**
Water Body Type: **Lake & Reservoir**

DECISION ID **44506** **Region 3**
Nacimiento Reservoir

Pollutant: **Metals**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: One line of evidence (LOE) is available in the administrative record to assess this pollutant but no data or information is associated with that LOE. The data cannot be found that was used in the initial assessment of this water segment-pollutant combination.

This decision for the general category of Metals has been replaced by individual decisions for each of the metals for which there are data. This water segment is being assessed for a full suite of metals such as Mercury. Those individual decisions replace this generic decision for Metals.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision is not supported by data and there are data assessed for several different pesticides for this water segment.

Line of Evidence (LOE) for Decision ID 44506, Metals **Region 3**
Nacimiento Reservoir

LOE ID: 3972

Pollutant: Metals
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: Placeholder reference pre-2006 303(d)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: Placeholder reference pre-2006 303(d)

Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 33120 Region 3

Nacimiento Reservoir

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.5 of the Listing Policy. Under 4.5 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Forty-three of the forty-four fish tissue samples exceed the evaluation guideline set to protect for the commercial beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Forty-three of the forty-four fish tissue samples exceed the evaluation guideline set to protect for the commercial beneficial use. This exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33120, Mercury Region 3

Nacimiento Reservoir

LOE ID:	697
Pollutant:	Mercury

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Four out of 4 samples exceeded. Four filet composite samples of largemouth bass were collected (TSMP, 2002). All samples exceeded the guideline.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	OEHHA Screening Value of 0.3 ug/g for mercury.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Two stations were sampled: Dip Creek arm of Lake Nacimiento and on Las Tablas Creek arm of Lake Nacimiento.
Temporal Representation:	Samples were collected annually in 1992-93 and 1996.
Environmental Conditions:	
QAPP Information:	Toxic Substances Monitoring Program 1992-93 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish and Game.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33120, Mercury **Region 3**

Nacimiento Reservoir

LOE ID:	31016
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	36
Number of Exceedances:	35
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Fish were collected for tissue analysis at three locations from Nacimiento Reservoir. A total of 36 sample composites were generated from two species: Smallmouth Bass (33) and Common Carp (3). Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). A total of 35 out of 36 samples exceeded the OHHEA fish tissue screening value for human health.
Data Reference:	Data associated with report entitled: Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 0.3 mg/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from three locations in Nacimiento Reservoir. As discussed in the Lakes and Reserviors Report (SWAMP, 2009), individual sample locations consisted of an area within a given waterbody with an approximate one-mile diameter, from which multiple fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody. Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008" (SWAMP, 2008). Data collected from this waterbody was assigned under Station Name "Lake Nacimiento" in the SWAMP report.
Temporal Representation:	Samples were collected on July 2, 2007
Environmental Conditions:	There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in "Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 33120, Mercury **Region 3**

Nacimiento Reservoir

LOE ID:	55494
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	4
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 4 of 4 samples exceed the criterion for Mercury. Composites were generated from smallmouth bass (33 composites - 1 fish per composite) and common carp (3 composites - 5 fish per composite) for 3 locations. The composites were averaged for each species per location. The 3 samples for smallmouth bass and 1 sample for common carp exceeded the criterion. Two common carp composites could not be used in the assessment due to total fish lengths that did not fall within lengths noted in the guideline. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on

	Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 3 locations. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51482**	**Region 3**
Nacimiento Reservoir		

Pollutant:	**Aldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a

beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51482, Aldrin **Region 3**

Nacimiento Reservoir

LOE ID:	55511
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51482, Aldrin **Region 3**

Nacimiento Reservoir

LOE ID:	55510
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations

	found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51484**	**Region 3**
Nacimiento Reservoir		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51484, Chlordane **Region 3**

Nacimiento Reservoir

LOE ID:	55525
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of

	the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51484, Chlordane **Region 3**

Nacimiento Reservoir

LOE ID:	55526
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency

Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51484, Chlordane **Region 3**

Nacimiento Reservoir

LOE ID:	55530
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for

	skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51543**	**Region 3**
Nacimiento Reservoir		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51543, DDT (Dichlorodiphenyltrichloroethane) Region 3

Nacimiento Reservoir

LOE ID:	55496
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51543, DDT (Dichlorodiphenyltrichloroethane) Region 3

Nacimiento Reservoir

LOE ID:	55486
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring

	Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG. 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51543, DDT (Dichlorodiphenyltrichloroethane) Region 3

Nacimiento Reservoir

LOE ID:	55487
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were

	collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51485**	**Region 3**
Nacimiento Reservoir		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51485, Dieldrin **Region 3**

Nacimiento Reservoir

LOE ID:	55531
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus

appendices and attachments

Line of Evidence (LOE) for Decision ID 51485, Dieldrin **Region 3**

Nacimiento Reservoir

LOE ID:	55536
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).

QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51485, Dieldrin **Region 3**

Nacimiento Reservoir

LOE ID:	55537
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Dieldrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51486** **Region 3**

Nacimiento Reservoir

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51486, Endrin **Region 3**

Nacimiento Reservoir

LOE ID:	55546
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51486, Endrin **Region 3**

Nacimiento Reservoir

LOE ID:	55544

Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51486, Endrin **Region 3**

Nacimiento Reservoir

LOE ID:	55545
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51487	Region 3
Nacimiento Reservoir		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51487, Heptachlor	**Region 3**
Nacimiento Reservoir	

LOE ID:	55551
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (15 fish per composite) was generated from one species: common carp.

	Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51487, Heptachlor **Region 3**

Nacimiento Reservoir

LOE ID:	55550
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial

	use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51488**	**Region 3**
Nacimiento Reservoir		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51488, Heptachlor epoxide **Region 3**

Nacimiento Reservoir

LOE ID:	55552
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report

	on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51488, Heptachlor epoxide **Region 3**

Nacimiento Reservoir

LOE ID:	55469
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008

	Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51488, Heptachlor epoxide **Region 3**

Nacimiento Reservoir

LOE ID:	55470
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51489**	**Region 3**
Nacimiento Reservoir		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a

beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51489, Hexachlorobenzene/ HCB **Region 3**

Nacimiento Reservoir

LOE ID:	55475
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51490**	**Region 3**
Nacimiento Reservoir		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51490, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Nacimiento Reservoir

LOE ID:	55484
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of

	the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51490, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Nacimiento Reservoir

LOE ID:	55485
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support

	Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51490, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Nacimiento Reservoir

LOE ID:	55476
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane

	concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51540**	**Region 3**
Nacimiento Reservoir		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of zero fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51540, Mirex **Region 3**

Nacimiento Reservoir

LOE ID:	55495
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring

	Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID 51541 Region 3

Nacimiento Reservoir

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51541, PCBs (Polychlorinated biphenyls) Region 3

Nacimiento Reservoir

LOE ID:	55477

Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51541, PCBs (Polychlorinated biphenyls) **Region 3**

Nacimiento Reservoir

LOE ID:	55503
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and

Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51541, PCBs (Polychlorinated biphenyls) **Region 3**

Nacimiento Reservoir

LOE ID:	55504
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and

QAPP Information Reference(s):	analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51542	Region 3
Nacimiento Reservoir		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51542, Selenium	**Region 3**
Nacimiento Reservoir	

LOE ID:	55478
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51483**	**Region 3**
Nacimiento Reservoir		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51483, alpha-Endosulfan (Endosulfan 1) **Region 3**

Nacimiento Reservoir

LOE ID:	55517
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June

	2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51483, alpha-Endosulfan (Endosulfan 1) **Region 3**

Nacimiento Reservoir

LOE ID:	55516
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51483, alpha-Endosulfan (Endosulfan 1) Region 3

Nacimiento Reservoir

LOE ID:	55518
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Nacimiento Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (15 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Nacimiento Reservoir was collected at 1 monitoring site [Lake Nacimiento - 309PLN060]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/2/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Margarita Lake**
Water Body ID: **CAL3098111219980805095043**
Water Body Type: **Lake & Reservoir**

DECISION ID **51568** **Region 3**
Santa Margarita Lake

Pollutant: **Aldrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51568, Aldrin **Region 3**
Santa Margarita Lake

LOE ID: 58053

Pollutant: Aldrin
LOE Subgroup: Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51568, Aldrin **Region 3**

Santa Margarita Lake

LOE ID:	58054

Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51570** **Region 3**

Santa Margarita Lake

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51570, Chlordane **Region 3**

Santa Margarita Lake

LOE ID:	58064
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51570, Chlordane **Region 3**

Santa Margarita Lake

LOE ID:	58065
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial

	use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51570, Chlordane **Region 3**

Santa Margarita Lake

LOE ID:	58069
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51609**	**Region 3**
Santa Margarita Lake		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51609, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Santa Margarita Lake

LOE ID:	58047
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51609, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Margarita Lake

LOE ID:	58048
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.

Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51609, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Margarita Lake

LOE ID:	58046
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass.

	Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51571**	**Region 3**
Santa Margarita Lake		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single

fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51571, Dieldrin **Region 3**

Santa Margarita Lake

LOE ID:	58070
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51571, Dieldrin **Region 3**

Santa Margarita Lake

LOE ID:	58075
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51571, Dieldrin **Region 3**

Santa Margarita Lake

LOE ID:	58076
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51572**	**Region 3**
Santa Margarita Lake		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51572, Endrin **Region 3**

Santa Margarita Lake

LOE ID:	58082
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32

	g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51572, Endrin **Region 3**

Santa Margarita Lake

LOE ID:	58081
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations

	found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51572, Endrin **Region 3**

Santa Margarita Lake

LOE ID:	58080
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51573**	**Region 3**
Santa Margarita Lake		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51573, Heptachlor **Region 3**

Santa Margarita Lake

LOE ID:	58086
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can

	be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51573, Heptachlor **Region 3**

Santa Margarita Lake

LOE ID:	58087
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue

	samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51579**	**Region 3**
Santa Margarita Lake		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51579, Heptachlor epoxide **Region 3**

Santa Margarita Lake

LOE ID:	58093
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus

appendices and attachments

Line of Evidence (LOE) for Decision ID 51579, Heptachlor epoxide **Region 3**

Santa Margarita Lake

LOE ID:	58094
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51579, Heptachlor epoxide **Region 3**

Santa Margarita Lake

LOE ID:	58088
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and

	Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51582** **Region 3**

Santa Margarita Lake

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51582, Hexachlorobenzene/ HCB **Region 3**

Santa Margarita Lake

LOE ID:	58098
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51584**	**Region 3**

Santa Margarita Lake

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51584, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) — Region 3

Santa Margarita Lake

LOE ID:	58103
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth

	bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51584, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Margarita Lake

LOE ID:	58099
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51584, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Santa Margarita Lake

LOE ID:	58104
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51593** **Region 3**

Santa Margarita Lake

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51593, Mercury **Region 3**

Santa Margarita Lake

LOE ID:	58040
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury. Eleven composites (1 fish per composite) were generated from one species: largemouth bass. Composites were averaged for the location. One composite could not be used in the assessment due to a total fish length that did not fall within lengths noted in the guideline. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51596**	**Region 3**
Santa Margarita Lake		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51596, Mirex **Region 3**

Santa Margarita Lake

LOE ID:	58041
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51600**	**Region 3**
Santa Margarita Lake		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51600, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Margarita Lake

LOE ID:	58042
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can

	be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51600, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Margarita Lake

LOE ID:	58044
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51600, PCBs (Polychlorinated biphenyls) **Region 3**

Santa Margarita Lake

LOE ID:	58043
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from

	bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51602**	**Region 3**
Santa Margarita Lake		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51602, Selenium **Region 3**

Santa Margarita Lake

LOE ID:	58045
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP), California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and

QAPP Information Reference(s):	analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51569	Region 3
Santa Margarita Lake		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51569, alpha-Endosulfan (Endosulfan 1)	**Region 3**
Santa Margarita Lake	

LOE ID:	58059
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51569, alpha-Endosulfan (Endosulfan 1) **Region 3**

Santa Margarita Lake

LOE ID:	58055
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51569, alpha-Endosulfan (Endosulfan 1) **Region 3**

Santa Margarita Lake

LOE ID:	58060
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Santa Margarita Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Santa Margarita Lake was collected at 1 monitoring site [Santo Margarita Lake - 309PSM206]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 3/10/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Espinosa Lake**
Water Body ID: **CAL3091900020020117151744**
Water Body Type: **Lake & Reservoir**

DECISION ID	40014	Region 3
Espinosa Lake		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 of the Listing Policy. Under 3.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. All of the 39 samples exceed the Evaluation Guideline set to protect aquatic life (Siepmann and Finlayson, 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. All of the 39 samples exceed the Evaluation Guideline set to protect aquatic life (Siepmann and Finlayson, 2000, , with minor corrections to significant figures as described in Beaulaurier et al., 2005) and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 40014, Chlorpyrifos **Region 3**

Espinosa Lake

LOE ID:	14038
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Espinosa Lake to determine beneficial use support and results are as follows: 39 of 39 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Espinosa Lake was collected at 2 monitoring sites [Rodgers Rd, Espinosa Lake]
Temporal Representation:	Data was collected over the time period 7/8/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID **41963** **Region 3**

Espinosa Lake

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

A TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard for this waterbody.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The decision for the 2010 303(d) list used 0.16 ug/L (Siepmann and Finlayson, 2000) as the evaluation guideline and resulted in twenty-three out of thirty-eight samples exceeding this guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. There is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twenty-three out of thirty-eight samples exceed the evaluation guideline (Siepmann and Finlayson, 2000) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41963, Diazinon **Region 3**

Espinosa Lake

LOE ID:	13903
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat

Number of Samples:	38
Number of Exceedances:	23
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Espinosa Lake to determine beneficial use support and results are as follows: 23 of 38 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Espinosa Lake was collected at 2 monitoring sites [Rodgers Rd, Espinosa Lake]
Temporal Representation:	Data was collected over the time period 7/8/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Hernandez Reservoir**
Water Body ID: **CAL3055001619980828154910**
Water Body Type: **Lake & Reservoir**

DECISION ID **33572** **Region 3**
Hernandez Reservoir

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)(2012)
Revision Status	Revised
Sources:	Erosion/Siltation
TMDL Name:	Clear Creek and Hernandez Reservoir Mercury
TMDL Project Code:	123
Date TMDL Approved by USEPA:	06/21/2004
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.5 of the Listing Policy. Under 4.5 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Four of the five fish tissue samples exceeded the evaluation guideline set to protect for the commercial beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Four of the five fish tissue samples exceed the evaluation guideline set to protect for the commercial beneficial use these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Clear Creek and Hernandez Reservoir Mercury TMDL has been approved by the USEPA on June 21, 2004.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33572, Mercury — Region 3

Hernandez Reservoir

LOE ID:	696
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	4
Number of Exceedances:	3
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Three out of 4 samples exceeded. Four filet composite samples were collected: 2 largemouth bass, 1 channel catfish, and 1 bullhead. Bass were collected in 1995 and 2002, channel catfish in 1995, and bullhead in 2002. Only the bullhead sample did not exceed the guideline (TSMP, 2002).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	0.3 ug/g (OEHHA Screening Value).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	One station located in Lake Hernandez on the San Benito River.
Temporal Representation:	Samples were collected 11/30/95 and 11/7/02.
Environmental Conditions:	
QAPP Information:	Toxic Substances Monitoring Program 1994-95 Data Report. Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish and Game
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33572, Mercury — Region 3

Hernandez Reservoir

LOE ID:	695
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Not Recorded
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33572, Mercury **Region 3**

Hernandez Reservoir

LOE ID: 54517

Pollutant: Mercury
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue
Fraction: Fish fillet

Beneficial Use: Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples: 1
Number of Exceedances: 1

Data and Information Type: Fish tissue analysis
Data Used to Assess Water Quality: Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury. Sixteen composites (1 fish per composite) were generated from one species: largemouth bass. Composites were averaged for the location. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference: Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA
Statewide Lakes Sportfish Contamination Study 2007 2008
Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.

SWAMP Data: SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference: Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline: The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference: Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001

Spatial Representation: Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual

	sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51312**	**Region 3**
Hernandez Reservoir		

Pollutant:	**Aldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51312, Aldrin	**Region 3**
Hernandez Reservoir	

LOE ID:	54502
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51314	Region 3
Hernandez Reservoir		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51314, Chlordane	**Region 3**
Hernandez Reservoir	

LOE ID:	54505
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane,

	Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51314, Chlordane **Region 3**

Hernandez Reservoir

LOE ID:	54506
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51341**	**Region 3**
Hernandez Reservoir		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51341, DDT (Dichlorodiphenyltrichloroethane) Region 3

Hernandez Reservoir

LOE ID:	54523
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51341, DDT (Dichlorodiphenyltrichloroethane) Region 3

Hernandez Reservoir

LOE ID:	54522
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.

Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51315**	**Region 3**
Hernandez Reservoir		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the

level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51315, Dieldrin **Region 3**

Hernandez Reservoir

LOE ID:	54508
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51315, Dieldrin **Region 3**

Hernandez Reservoir

LOE ID:	54507
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51316**	**Region 3**
Hernandez Reservoir		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51316, Endrin **Region 3**

Hernandez Reservoir

LOE ID:	54510
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51316, Endrin **Region 3**

Hernandez Reservoir

LOE ID:	54509
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.

Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51317**	**Region 3**
Hernandez Reservoir		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51317, Heptachlor **Region 3**

Hernandez Reservoir

LOE ID:	54511
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).

QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51318	Region 3
Hernandez Reservoir		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51318, Heptachlor epoxide	**Region 3**
Hernandez Reservoir	

LOE ID:	54513
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51318, Heptachlor epoxide **Region 3**

Hernandez Reservoir

LOE ID:	54512

Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51319** **Region 3**

Hernandez Reservoir

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51319, Hexachlorobenzene/ HCB — Region 3

Hernandez Reservoir

LOE ID:	54514
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical

	Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51320**	**Region 3**
Hernandez Reservoir		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish

tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51320, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Hernandez Reservoir

LOE ID:	54515
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51320, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Hernandez Reservoir

LOE ID:	54516
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates:

	April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51321**	**Region 3**
Hernandez Reservoir		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of zero fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51321, Mirex **Region 3**

Hernandez Reservoir

LOE ID:	54518
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32

	g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51322**	**Region 3**
Hernandez Reservoir		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51322, PCBs (Polychlorinated biphenyls) **Region 3**

Hernandez Reservoir

LOE ID:	54520
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the

	overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51322, PCBs (Polychlorinated biphenyls) Region 3

Hernandez Reservoir

LOE ID:	54519
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [

	Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51324**	**Region 3**
Hernandez Reservoir		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51324, Selenium	**Region 3**

Hernandez Reservoir

LOE ID:	54521
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51313	Region 3
Hernandez Reservoir		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51313, alpha-Endosulfan (Endosulfan 1)	**Region 3**
Hernandez Reservoir	

LOE ID:	54504
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51313, alpha-Endosulfan (Endosulfan 1) **Region 3**

Hernandez Reservoir

LOE ID:	54503
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Hernandez Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Hernandez Reservoir was collected at 1 monitoring site [Hernandez Reservoir - 305PHR112]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 6/24/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Felipe Lake**
Water Body ID: **CAL3053002020020124135155**
Water Body Type: **Lake & Reservoir**

DECISION ID **39243** **Region 3**
San Felipe Lake

Pollutant: **Ammonia**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: No new data were assessed.

The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant total ammonia. This decision contains all of the LOEs from the previous decision.

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. None of the 3 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the Evaluation Guideline (EPA's Lifetime Health advisory level, 2006) applied to protect the Municipal & Domestic Supply beneficial use and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39243, Ammonia **Region 3**
San Felipe Lake

LOE ID: 17835

Pollutant: Ammonia as Nitrogen
LOE Subgroup: Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Felipe Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ammonia As N, Total.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for San Felipe Lake was collected at 3 monitoring sites [SF-BTM SF-MID SF-SUR]
Temporal Representation:	Data was collected on a single day 6/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39275**	**Region 3**
San Felipe Lake		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 3 samples exceed the water quality objectives for Municipal and Domestic Supply or for Agricultural Supply. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 3 samples exceed the water quality objectives for Municipal and Domestic Supply or for Agricultural Supply and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39275, Nitrate **Region 3**

San Felipe Lake

LOE ID:	17746
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Felipe Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Felipe Lake was collected at 3 monitoring sites [SF-SUR SF-MID SF-BTM]
Temporal Representation:	Data was collected on a single day 6/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39275, Nitrate **Region 3**

San Felipe Lake

LOE ID:	17745
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Monterey Area Research Consortium (R3_MARC) data for San Felipe Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Nitrate as N.
Data Reference:	Final Data File used for assessment: Marc Los Huertos Water Quality Data, file A Final Data File used for assessment: Marc Los Huertos Water Quality Data, file B
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for San Felipe Lake was collected at 3 monitoring sites [SF-SUR SF-MID SF-BTM]
Temporal Representation:	Data was collected on a single day 6/23/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Regional Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Chesbro Reservoir**
Water Body ID: **CAL3052001420020124162255**
Water Body Type: **Lake & Reservoir**

DECISION ID **41294** **Region 3**
Chesbro Reservoir

Pollutant: **Mercury**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2018
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Fourteen out of fourteen fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Fourteen out of fourteen fish tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41294, Mercury **Region 3**
Chesbro Reservoir

LOE ID: 77284

Pollutant: Mercury
LOE Subgroup: Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury. Composites were generated from largemouth bass (11 composites - 1 fish per composite) and common carp (2 composites - 5 fish per composite). The 1 sample for largemouth bass exceeded the criterion. The largemouth bass composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Two common carp composite sand 2 largemouth bass composites could not be used in the assessment due to total fish lengths that did not fall within lengths noted in the guideline. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 41294, Mercury **Region 3**

Chesbro Reservoir

LOE ID:	31013
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Fish were collected for tissue analysis at one location from Chesbro Reservoir. A total of 13 sample composites were generated from two species: Largemouth Bass (11) and Common Carp (2). Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). A total of 13 out of 13 samples exceeded the OHHEA fish tissue screening value for human health.
Data Reference:	Data associated with report entitled: Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 0.3 mg/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from one location in Chesbro Reservoir. As discussed in the Lakes and Reserviors Report (SWAMP, 2009), individual sample locations consisted of an area within a given waterbody with an approximate one-mile diameter, from which multiple fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody. Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008" (SWAMP, 2008).
Temporal Representation:	Samples were collected on July 17, 2007
Environmental Conditions:	There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in "Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus

appendices and attachments

DECISION ID	51295	Region 3
Chesbro Reservoir		

Pollutant:	**Aldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51295, Aldrin	Region 3
Chesbro Reservoir	

LOE ID:	77293
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial

	use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51295, Aldrin **Region 3**

Chesbro Reservoir

LOE ID:	77292
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51298**	**Region 3**
Chesbro Reservoir		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample exceeded the evaluation guideline applied to protect the commercial beneficial use. The single fish tissue sample did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample exceeded the evaluation guideline applied to protect the commercial beneficial use, but did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51298, Chlordane **Region 3**

Chesbro Reservoir

LOE ID:	77298
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51298, Chlordane **Region 3**

Chesbro Reservoir

LOE ID:	77297
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total

	chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51298, Chlordane **Region 3**

Chesbro Reservoir

LOE ID:	77299
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Chlordane,

	Total. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51310**	**Region 3**
Chesbro Reservoir		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. The single fish tissue sample did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use, but did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51310, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Chesbro Reservoir

LOE ID:	77291
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT, Total. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June

	2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51310, DDT (Dichlorodiphenyltrichloroethane) Region 3

Chesbro Reservoir

LOE ID:	77289
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.

Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51310, DDT (Dichlorodiphenyltrichloroethane) Region 3

Chesbro Reservoir

LOE ID:	77290
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing

	Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51299**	**Region 3**
Chesbro Reservoir		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single

fish tissue sample exceeded the evaluation guideline applied to protect the commercial beneficial use. The single fish tissue sample did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample exceeded the evaluation guideline applied to protect the commercial beneficial use, but did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51299, Dieldrin **Region 3**

Chesbro Reservoir

LOE ID:	77301
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51299, Dieldrin **Region 3**

Chesbro Reservoir

LOE ID:	77300
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51299, Dieldrin **Region 3**

Chesbro Reservoir

LOE ID:	54003
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dieldrin. Two composites (5 fish per composite) were generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51300**	**Region 3**
Chesbro Reservoir		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect the commercial beneficial use, nor did it exceed the evaluation guideline applied to protect the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline applied to protect the commercial beneficial use, nor did it exceed the evaluation guideline applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51300, Endrin **Region 3**

Chesbro Reservoir

LOE ID:	77302
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51300, Endrin **Region 3**

Chesbro Reservoir

LOE ID:	77303
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that

	adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51300, Endrin **Region 3**

Chesbro Reservoir

LOE ID:	77304
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51301**	**Region 3**
Chesbro Reservoir		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51301, Heptachlor **Region 3**

Chesbro Reservoir

LOE ID:	77305
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency

Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51301, Heptachlor **Region 3**

Chesbro Reservoir

LOE ID:	77306
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from

	bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51302**	**Region 3**
Chesbro Reservoir		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. Two composites were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51302, Heptachlor epoxide **Region 3**

Chesbro Reservoir

LOE ID:	77307
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51302, Heptachlor epoxide **Region 3**

Chesbro Reservoir

LOE ID:	77308
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient

	Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51302, Heptachlor epoxide **Region 3**

Chesbro Reservoir

LOE ID:	77309
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. Two composites (5 fish per composite) were generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Two composites were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water

Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51303**	**Region 3**
Chesbro Reservoir		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51303, Hexachlorobenzene/ HCB **Region 3**

Chesbro Reservoir

LOE ID:	77280
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods

QAPP Information Reference(s):	described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51304	Region 3
Chesbro Reservoir		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect the commercial beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51304, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	**Region 3**
Chesbro Reservoir	

LOE ID:	77282
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51304, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Chesbro Reservoir

LOE ID:	77281

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51304, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Chesbro Reservoir

LOE ID:	77283
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).

QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51306	Region 3
Chesbro Reservoir		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Two composites were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51306, Mirex	**Region 3**
Chesbro Reservoir	

LOE ID:	77285
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. Two composites (5 fish per composite) were generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Two composites were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51308**	**Region 3**
Chesbro Reservoir		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. The single fish tissue sample did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use, but did not exceed the evaluation guideline applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51308, PCBs (Polychlorinated biphenyls) **Region 3**

Chesbro Reservoir

LOE ID:	77287
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB

	was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51308, PCBs (Polychlorinated biphenyls) **Region 3**

Chesbro Reservoir

LOE ID:	77286
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. Two composites (5 fish per composite) were generated from one species: common carp.

	The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51308, PCBs (Polychlorinated biphenyls) **Region 3**

Chesbro Reservoir

LOE ID:	77288
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PCB, Total. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51309**	**Region 3**
Chesbro Reservoir		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51309, Selenium **Region 3**

Chesbro Reservoir

LOE ID:	53979
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (5 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June

	2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51311**	**Region 3**
Chesbro Reservoir		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51311, alpha-Endosulfan (Endosulfan 1) **Region 3**

Chesbro Reservoir

LOE ID:	77294
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan,

	Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51311, alpha-Endosulfan (Endosulfan 1) **Region 3**

Chesbro Reservoir

LOE ID:	77295
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. Two composites (5 fish per composite) were generated from one species: common carp The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51311, alpha-Endosulfan (Endosulfan 1) **Region 3**

Chesbro Reservoir

LOE ID:	77296
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Chesbro Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. Two composites (5 fish per composite) were generated from one species: common carp. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase

	in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Chesbro Reservoir was collected at 1 monitoring site [Chesbro Reservoir - 305PCB032]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/17/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Uvas Reservoir**
Water Body ID: **CAL3052001220020124163614**
Water Body Type: **Lake & Reservoir**

DECISION ID **39705** **Region 3**
Uvas Reservoir

Pollutant: **Mercury**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2018
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.5 of the Listing Policy. Under 4.5 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Twelve of the twelve fish tissue samples exceed the evaluation guideline set to protect for the commercial beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twelve of the twelve fish tissue samples exceed the evaluation guideline set to protect for the commercial beneficial use. This exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39705, Mercury **Region 3**
Uvas Reservoir

LOE ID: 31015

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	11
Number of Exceedances:	11
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Fish were collected for tissue analysis at one location from Uvas Reservoir. A total of 11 sample composites were generated from one species: Largemouth Bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). A total of 11 out of 11 samples exceeded the OHHEA fish tissue screening value for human health.
Data Reference:	Data associated with report entitled: Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 0.3 mg/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from one location in Uvas Reservoir. As discussed in the Lakes and Reserviors Report (SWAMP, 2009), individual sample locations consisted of an area within a given waterbody with an approximate one-mile diameter, from which multiple fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody. Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008" (SWAMP, 2008).
Temporal Representation:	Samples were collected on July 5, 2007
Environmental Conditions:	There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in "Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 39705, Mercury **Region 3**

Uvas Reservoir

LOE ID:	58884
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Mercury. Eleven composites (1 fish per composite) were generated from one species: largemouth bass. Composites were averaged for the location. One composite could not be used in the assessment due to a total fish length that did not fall within lengths noted in the guideline. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51614	Region 3
Uvas Reservoir		

Pollutant:	**Aldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51614, Aldrin	**Region 3**
Uvas Reservoir	

LOE ID:	58586
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use

	support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51621**	**Region 3**
Uvas Reservoir		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51621, Chlordane **Region 3**

Uvas Reservoir

LOE ID:	58852
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51621, Chlordane **Region 3**

Uvas Reservoir

LOE ID:	58847
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP)

	Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51633**	**Region 3**
Uvas Reservoir		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51633, DDT (Dichlorodiphenyltrichloroethane) Region 3

Uvas Reservoir

LOE ID:	58909
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT

	concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51633, DDT (Dichlorodiphenyltrichloroethane) Region 3

Uvas Reservoir

LOE ID:	58920
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51623**	**Region 3**
Uvas Reservoir		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline applied to protect for aquatic life beneficial uses but did exceed the evaluation guideline applied to protect for the commercial beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51623, Dieldrin **Region 3**

Uvas Reservoir

LOE ID:	58853
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring

	Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51623, Dieldrin **Region 3**

Uvas Reservoir

LOE ID:	58858
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were

	collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51624**	**Region 3**
Uvas Reservoir		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51624, Endrin	**Region 3**
Uvas Reservoir	

LOE ID:	58859
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51624, Endrin **Region 3**

Uvas Reservoir

LOE ID:	58860
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and

Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51625	Region 3
Uvas Reservoir		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51625, Heptachlor	**Region 3**
Uvas Reservoir	

LOE ID:	58865
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51626**	**Region 3**
Uvas Reservoir		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the

Conclusion:	Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51626, Heptachlor epoxide **Region 3**

Uvas Reservoir

LOE ID:	58866
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51626, Heptachlor epoxide **Region 3**

Uvas Reservoir

LOE ID:	58871
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring

	Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51627**	**Region 3**
Uvas Reservoir		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51627, Hexachlorobenzene/ HCB **Region 3**

Uvas Reservoir

LOE ID:	58872
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8

	ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51628**	**Region 3**
Uvas Reservoir		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51628, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Uvas Reservoir

LOE ID:	58877
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in

	the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51628, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Uvas Reservoir

LOE ID:	58878
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.

Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51629**	**Region 3**
Uvas Reservoir		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of zero fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51629, Mirex **Region 3**

Uvas Reservoir

LOE ID:	58885
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID 51631 Region 3

Uvas Reservoir

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. The single fish tissue sample exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline applied to protect for aquatic life beneficial uses but did exceed the evaluation guideline applied to protect for the commercial beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51631, PCBs (Polychlorinated biphenyls) Region 3

Uvas Reservoir

LOE ID:	58898
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51631, PCBs (Polychlorinated biphenyls) **Region 3**

Uvas Reservoir

LOE ID:	58897
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51632	Region 3
Uvas Reservoir		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51632, Selenium	**Region 3**
Uvas Reservoir	

LOE ID:	58908
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One

	composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51788**	**Region 3**
Uvas Reservoir		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51788, alpha-Endosulfan (Endosulfan 1) **Region 3**

Uvas Reservoir

LOE ID:	58984
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51788, alpha-Endosulfan (Endosulfan 1) **Region 3**

Uvas Reservoir

LOE ID:	58846
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Uvas Reservoir to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Uvas Reservoir was collected at 1 monitoring site [Uvas Reservoir - 305PUR072]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/5/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pinto Lake**
Water Body ID: **CAL3051003020020124122807**
Water Body Type: **Lake & Reservoir**

DECISION ID **40904** **Region 3**
Pinto Lake

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2018
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Sixty-one of the 147 samples exceed the water quality objective for Warm Freshwater Habitat.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty-one of the 147 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 40904, Oxygen, Dissolved **Region 3**
Pinto Lake

LOE ID: 56809

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat

Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Zero of 15 samples exceeded the Dissolved Oxygen objective.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Pinto Lake Dock.
Temporal Representation:	Samples were collected approximately once a month from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40904, Oxygen, Dissolved **Region 3**

Pinto Lake

LOE ID:	15084
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	132
Number of Exceedances:	61
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 61 of 132 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

DECISION ID 50528 Region 3

Pinto Lake

Pollutant:	**Aldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50528, Aldrin Region 3

Pinto Lake

LOE ID:	77338
Pollutant:	Aldrin

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Aldrin. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **50534** **Region 3**

Pinto Lake

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the warm freshwater habitat beneficial use. One out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the warm freshwater habitat beneficial use. One out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50534, Chlordane — Region 3

Pinto Lake

LOE ID:	77333
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlordane, Total.

	Three composites (5 fish per composite) were generated: 2 from common carp (composites averaged) and 1 from largemouth bass. The sample for common carp exceeded the guideline. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 50534, Chlordane **Region 3**

Pinto Lake

LOE ID:	77332
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlordane, Total. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47888**	**Region 3**
Pinto Lake		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47888, Chlorpyrifos **Region 3**

Pinto Lake

LOE ID:	56798
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos. Two composites (5 fish per composite) were generated: 1 from common carp and 1 from largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP)

	Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**47176**	**Region 3**
Pinto Lake		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47176, Diazinon **Region 3**

Pinto Lake

LOE ID:	56799
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon. Two composites (5 fish per composite) were generated: 1 from common carp and 1 from largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in fish tissue is 1,500 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)

Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	50535	Region 3
Pinto Lake		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the warm freshwater habitat beneficial use. One out of one fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite for largemouth bass was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the warm freshwater habitat beneficial use. One out of one fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. These do not exceed the allowable frequency

listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50535, Dieldrin **Region 3**

Pinto Lake

LOE ID:	77334
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dieldrin. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged by species. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The

	number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 50535, Dieldrin **Region 3**

Pinto Lake

LOE ID:	77335
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dieldrin. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The sample for common carp exceeded the guideline. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. One composite for largemouth bass was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for

	skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**50536**	**Region 3**
Pinto Lake		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50536, Endrin **Region 3**

Pinto Lake

LOE ID:	77336
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged by species. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods

	described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 50536, Endrin **Region 3**

Pinto Lake

LOE ID:	77337
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endrin. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the

	supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **47355** **Region 3**

Pinto Lake

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for Water Contact Recreation (i.e. swimming, wading etc.). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 15 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47355, Escherichia coli (E. coli) **Region 3**

Pinto Lake

LOE ID:	56800
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of 15 samples exceeded the E. coli Objective of 235 MPN/100mL.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA single sample maximum allowable density for E. coli is 235/100 MPN. USEPA Ambient Water Quality Criteria for Bacteria -1986.
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected from Pinto Lake Dock. CAL3051003020020124122807
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	NO QAPP provided. Data quality ok. City of Watsonville.
QAPP Information Reference(s):	

DECISION ID	**50537**	**Region 3**
Pinto Lake		

Pollutant:	**Ethion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50537, Ethion **Region 3**

Pinto Lake

LOE ID:	56802
Pollutant:	Ethion
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethion. Two composites (5 fish per composite) were generated: 1 from common carp and 1 from largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for ethion in fish tissue is 1,100 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the

	supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **50538** **Region 3**

Pinto Lake

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50538, Heptachlor **Region 3**

Pinto Lake

LOE ID:	77341
Pollutant:	Heptachlor

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Heptachlor. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **50539** **Region 3**

Pinto Lake

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the warm freshwater habitat beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. Three composites were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the warm freshwater habitat beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50539, Heptachlor epoxide — Region 3

Pinto Lake

LOE ID:	77342
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Heptachlor epoxide. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 50539, Heptachlor epoxide **Region 3**

Pinto Lake

LOE ID:	77343
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Three composites were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **50540** **Region 3**

Pinto Lake

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50540, Hexachlorobenzene/ HCB **Region 3**

Pinto Lake

LOE ID:	77344
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Hexachlorobenzene. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).

Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**50541**	**Region 3**
Pinto Lake		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guidelines. This sample size is insufficient to determine,

with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50541, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Pinto Lake

LOE ID:	77345
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 50541, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Pinto Lake

LOE ID:	77346
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for HCH, gamma. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**41301**	**Region 3**
Pinto Lake		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of fourteen fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of fourteen fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41301, Mercury **Region 3**

Pinto Lake

LOE ID:	77347
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury. Composites were generated from largemouth bass (11 composites - 1 fish per composite) and common carp (2 composites - 5 fish per composite). Composites were not spatially independent (as defined in the Listing Policy) and so were averaged by species. Two common carp composites could not be used in the assessment due to total fish lengths that did not fall within lengths noted in the guideline. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 41301, Mercury **Region 3**

Pinto Lake

LOE ID:	31014
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Fish were collected for tissue analysis at one location from Pinto Lake. A total of 13 sample composites were generated from two species: Largemouth Bass (11) and Common Carp (2). Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). A total of 0 out of 13 samples exceeded the OHHEA fish tissue screening value for human health.
Data Reference:	Data associated with report entitled: Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Office of Environmental Health Hazard Assessment (OEHHA) Screening Value of 0.3 mg/kg to protect human health when consuming fish (OEHHA, 1999).
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment
Spatial Representation:	Samples were collected from one location in Pinto Lake. As discussed in the Lakes and Reserviors Report (SWAMP, 2009), individual sample locations consisted of an area within a given waterbody with an approximate one-mile diameter, from which multiple fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody. Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008" (SWAMP, 2008).
Temporal Representation:	Samples were collected on July 25, 2007
Environmental Conditions:	There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in "Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**50594**	**Region 3**
Pinto Lake		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline. Three composites were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of zero fish tissue samples exceeded the evaluation guideline. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50594, Mirex **Region 3**

Pinto Lake

LOE ID:	77348
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Three composites were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.

Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **40891** **Region 3**

Pinto Lake

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero of the 148 nitrate samples exceed the water quality objectives for Municipal & Domestic Supply or for Agricultural Supply. Zero of the 15 Nitrate/Nitrite samples exceed the water quality objectives for Municipal & Domestic Supply or for Agricultural Supply. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the water quality objectives for Municipal & Domestic Supply or for Agricultural Supply and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40891, Nitrate **Region 3**

Pinto Lake

LOE ID:	56805
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded the criteria for nitrate + nitrite as N.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 lists the maximum concentration for nitrate + nitrite as N for livestock watering as 100 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Pinto Lake Dock.
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40891, Nitrate **Region 3**

Pinto Lake

LOE ID:	56804
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded the criteria for nitrate as N.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which

	adversely affect the agricultural beneficial use. Interpretation of advers effect shall be as derived from Table 3-3 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-3 shows that concentrations of nitrate as N greater than 30 mg/L will cause sever problems for sensitive crops.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Pinto Lake Dock.
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40891, Nitrate **Region 3**

Pinto Lake

LOE ID:	56806
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded the criteria for nitrate plus nitrite.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22. The maximum contaminant level listed in Table 64431-A for nitrate plus nitrite is 10 mg as N/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Pinto Lake Dock.
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40891, Nitrate **Region 3**

Pinto Lake

LOE ID:	56808

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded the criteria for nitrite as nitrogen.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22. The maximum contaminant level listed in Table 64431-A for nitrite is 1 mg as N/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Pinto Lake Dock.
Temporal Representation:	Samples were collected from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40891, Nitrate **Region 3**

Pinto Lake

LOE ID:	15041
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 133 samples exceed the criterion for Nitrate as N.
Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when nitrate exceeds 30 mg/L NO3 as N in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

Line of Evidence (LOE) for Decision ID 40891, Nitrate **Region 3**

Pinto Lake

LOE ID:	15042
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 133 samples exceed the criterion for Nitrate as N.
Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Objective for municipal and domestic supply uses of inland surface waters (Section II.A.2) states the following: waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15, Section 64435, Tables 2 and 3 as listed in Table 3-2. The maximum contaminant level listed in Table 3-2 (inorganic and fluoride concentrations not to be exceeded in domestic or municipal supply) for nitrate is 10.0 mg/L (NO3 as N).
Objective/Criterion Reference:	Title 22, Division 4, Ch. 15, Article 4, Section 64431, Table 64431-A

	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

DECISION ID	**49159**	**Region 3**
Pinto Lake		

Pollutant:	**Nitrogen, Nitrite**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of the 15 samples exceed the water quality objective for agricultural uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 15 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49159, Nitrogen, Nitrite	**Region 3**
Pinto Lake	

LOE ID:	56807
Pollutant:	Nitrogen, Nitrite
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Agricultural Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of 15 samples collected at the sample site exceeded the criteria for nitrite.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3.4 (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). Table 3-4 (page III-9) lists the maximum concentration for nitrite for livestock watering is 10 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at station Pinto Lake Dock.
Temporal Representation:	Samples were collected monthly from May 2009 to July 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

DECISION ID	**50595**	**Region 3**
Pinto Lake		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50595, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Pinto Lake

LOE ID:	56810
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PAH, Total. Two composites (5 fish per composite) were generated from 2 species: 1 from common carp and 1 from largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in fish

	tissue is 0.7 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**50596**	**Region 3**
Pinto Lake		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the warm freshwater habitat beneficial use. One out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect for the warm freshwater habitat beneficial use. One out of two fish tissue samples exceeded the evaluation guideline

applied to protect for the commercial beneficial use. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50596, PCBs (Polychlorinated biphenyls) **Region 3**

Pinto Lake

LOE ID:	77349
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for PCB, Total. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted

	of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 50596, PCBs (Polychlorinated biphenyls) **Region 3**

Pinto Lake

LOE ID:	77350
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for PCB, Total. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The sample for common carp exceeded the guideline. The common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged by species. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a

	carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**50597**	**Region 3**
Pinto Lake		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50597, Selenium **Region 3**

Pinto Lake

LOE ID:	56812
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (5 fish per composite) was generated from one species: common carp. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods

QAPP Information Reference(s):	described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	50529	Region 3
Pinto Lake		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two fish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50529, alpha-Endosulfan (Endosulfan 1)	**Region 3**
Pinto Lake	

LOE ID:	77331
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endosulfan I. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 50529, alpha-Endosulfan (Endosulfan 1) **Region 3**

Pinto Lake

LOE ID:	77339
Pollutant:	alpha-Endosulfan (Endosulfan 1)

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Endosulfan I. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **40921** **Region 3**

Pinto Lake

Pollutant:	**Ammonia**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the previously approved decision for total ammonia and combines that decision with the data for unionized ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Two of the 14 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and this use is not supported. Zero of the 133 samples exceed the EPA's Lifetime Health advisory level for total ammonia in drinking water and this use is fully supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 14 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40921, Ammonia — Region 3

Pinto Lake

LOE ID:	15024
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 133 samples exceed the criterion for Ammonia as N, Total.

Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Health Advisory 2006 Edition of the Drinking Water Standards and Health Advisories (EPA 822-R-06-013, 2006).
Objective/Criterion Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Evaluation Guideline:	EPA's Lifetime Health advisory level for total ammonia is 30.0 mg/L as stated on page 8 of the 2006 edition of the drinking water standards and health advisories. This Advisory Level is defined as "the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to ten days of exposure."
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

Line of Evidence (LOE) for Decision ID 40921, Ammonia **Region 3**

Pinto Lake

LOE ID:	56797
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	2 of 14 samples exceed the water quality objective for Un-ionized Ammonia (as N). Un-ionized ammonia (as N) was calculated from Total Ammonia (as N) from monthly samples reported in the data. The Un-ionized ammonia (as N) values were then established and compared to the Un-ionized Ammonia (as N) at 0.025 mg/L in the RB3 Basin Plan.
Data Reference:	City of Watsonville Long Term Management Strategy Data, May 2009-Jul. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Region (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters for toxicity.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected at Pinto Lake Dock.
Temporal Representation:	Samples were collected monthly from May 2009 to June 2010.
Environmental Conditions:	
QAPP Information:	Data were collected by the City of Watsonville staff for local watershed monitoring purposes. Samples were analyzed by City of Watsonville laboratory (ELAP #1179) and are consistent with 40 CFR 136 methods.
QAPP Information Reference(s):	

DECISION ID	50598	Region 3
Pinto Lake		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two out of two fish tissue samples exceeded the evaluation guideline applied to protect the commercial beneficial use. Zero out of two fish tissue samples exceeded the evaluation guideline applied to protect the warm freshwater habitat beneficial use. For the warm freshwater habitat beneficial use, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of two fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 50598, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Pinto Lake

LOE ID:	77340
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDT, Total. Three composites (5 fish per composite) were generated: 2 from common carp (composites averaged) and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. The samples for common carp and largemouth bass exceeded the guideline. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).
Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan

QAPP Information Reference(s):	"Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 50598, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pinto Lake

LOE ID:	77351
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for DDT, Total. Three composites (5 fish per composite) were generated: 2 from common carp and 1 from largemouth bass. The 2 common carp composites were not spatially independent (as defined in the Listing Policy) and so were averaged. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007- March 2008 Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 1 monitoring site [Pinto Lake - 305PPL088]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: June 2007-March 2008" (SWAMP, 2008).

Temporal Representation:	Data was collected on a single day 7/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID 40831 Region 3

Pinto Lake

Pollutant:	**Chloride**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 133 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 133 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40831, Chloride Region 3

Pinto Lake

LOE ID:	15331
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	133
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 133 samples exceed the criterion for Chloride.
Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when chloride exceeds 106 mg/L in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

DECISION ID	**40890**	**Region 3**
Pinto Lake		

Pollutant:	**Electrical Conductivity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 132 samples exceed the Agricultural Supply water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 132 samples exceed the Agricultural Supply water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40890, Electrical Conductivity **Region 3**

Pinto Lake

LOE ID:	15332
Pollutant:	Electrical Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	132
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 0 of 132 samples exceed the criterion for Conductivity(Us).
Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when conductivity exceeds 3.0 mS/cm in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

DECISION ID 40531 Region 3

Pinto Lake

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. However, Pinto Lake is not steelhead habitat and therefore this Evaluation Guideline is not applicable. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Pinto Lake is not steelhead habitat and therefore this Evaluation Guideline is not applicable. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40531, Turbidity Region 3

Pinto Lake

LOE ID:	14952
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	131
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 27 of 131 samples exceed the criterion for Turbidity(NTU).

Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

DECISION ID	**40889**	**Region 3**
Pinto Lake		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Twenty-seven of 61 samples exceeded the Evaluation Guideline (North Carolina Administrative code, Title 15A) and 22 of the 61 samples also exceed the World Health Organization Guideline for moderate probability of adverse health effects (e.g. skin irritations and gastrointestinal illness). Each of these support rejection of the null hypothesis.

In addition, photos show the extent of the bio-stimulation issues at pinto lake, where the water color is

green throughout the summer and fall and the water is thick with algae.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-seven of 61 samples exceeded the Evaluation Guideline (North Carolina Administrative code, Title 15A) and 22 of the 61 samples also exceed the World Health Organization Guideline for moderate probability of adverse health effects (e.g. skin irritations and gastrointestinal illness). Each of these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Photos document algal blooms in Pinto Lake and this violates the General Water Quality Objective set to protect aquatic life beneficial uses.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40889, Chlorophyll-a **Region 3**

Pinto Lake

LOE ID:	27027
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Waterboard Staff assessed chlorophyll a data collected from a three monitoring sites in Pinto Lake (305PINTO1, 305PINTO2 and 305PINTO1) to determine beneficial use support. These three sites are spatially independent and are located more than 200m apart. In addition to chlorophyll a analysis City of Watsonville staff also identified algal species present and made note of the relative density of these algae in each sample. The WHO guideline for chlorophyll a levels at which there is a moderate probability of adverse health effects (e.g. skin irritations and gastrointestinal illness) is 50 ug/L and having a dominance of cyanobacteria. The WHO guidelines also state the following genera are among Â“the most common toxic cyanobacteria in freshwaterÂ”: Microcystis, Anabaena and Aphanizomenon. Chlorophyll a samples were collected monthly from each of the three sites in the lake between June 2005 and May 2006. Of these, 22 of 61 chlorophyll a samples results exceeded 50 ug/L. In all but two samples exceeding the guideline value, one or more of the above listed cyanobacteria genera were dominate in the sample.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective for all inland surface waters states that waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and

	Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
Evaluation Guideline:	The WHO guideline for chlorophyll a levels at which there is a moderate probability of adverse health effects (e.g. skin irritations and gastrointestinal illness) is 50 ug/L and having a dominance of cyanobacteria.
Guideline Reference:	Guidelines for sage recreational water environments. Chapter 8: Algae and cyanobacteria in freshwater. Toxic Cyanobacteria in Water: A Guide to their Public Health Consequences, Monitoring and Management. World Health Organization. Edited by I. Chorus and J. Bartram. Long, England. 400 pp
Spatial Representation:	Data for this line of evidence was collected from three monitoring sites in Pinto Lake (305PINTO1, 305PINTO2 and 305PINTO1).
Temporal Representation:	Data was collected monthly by City of Watsonville Staff between June 2005 and May 2006.
Environmental Conditions:	
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40889, Chlorophyll-a **Region 3**

Pinto Lake

LOE ID:	15330
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	61
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 27 of 61 samples exceed the criterion for Chlorophyll a. In addition, three photos are available in the administrative record and show algal blooms in Pinto Lake.
Data Reference:	Aerial photo showing algal bloom in Pinto lake Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Presentation slides showing Microcystin data from Pinto Lake and other California waters. Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table

Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 3 monitoring sites [305PNTO3s - Pinto Lake - South near docks, 305PNTO1s - Pinto Lake - West Arm, 305PNTO2s - Pinto Lake - Center]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

DECISION ID	**42408**	**Region 3**
Pinto Lake		

Pollutant:	**Cyanobacteria hepatotoxic microcystins**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. But, the data were assessed using newer evaluation guidelines. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Three lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the 14 samples exceed the evaluation guideline for the Drinking Water beneficial use (USEPA, 2015). Seven of the 14 samples exceed the Water Contact Recreation(i.e. swimming) beneficial use (OEHHA, 2012). Ten of 14 samples exceeded the evaluation guideline (World Health Organization Guidelines) applied here to interpret toxic levels for wildlife. In addition to exceedances of this guideline value, Microcystis cells were identified in all 14 samples analyzed by the Watsonville City Laboratory. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of the 14 samples exceed the evaluation guideline for the Drinking Water beneficial use and seven of the 14 samples exceed the evaluation guideline for the Water Contact Recreation (i.e. swimming) beneficial use and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42408, Cyanobacteria hepatotoxic microcystins **Region 3**

Pinto Lake

LOE ID:	27034
Pollutant:	Cyanobacteria hepatotoxic microcystins
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Wildlife Habitat
Number of Samples:	14
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed microcystin toxin data collected from a single monitoring site in Pinto Lake, 305PINTO3s, to determine beneficial use support. Data was collected weekly between 9/28/2006 and 1/10/2007 by City of Watsonville Staff and analyzed at the CityÂ's lab. All fourteen samples contained Microcystis cells. Ten of fourteen samples exceed the criterion for Municipal and Domestic Supply objective as defined by the WHO guidelines (a tolerable daily intake (TDI) guideline value of 1.0 ug/L or ppb). Additional information on the data used for this assessment is below in "Environmental Conditions".
Data Reference:	City of Watsonville - Pinto Lake data submittal and correspondence Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	World Health Organization (WHO) Guidelines for drinking-water quality establishes a tolerable daily intake (TDI) guideline value of 1.0 ug/L for microcystin-LR toxin in drinking water. WHO states this value should be applied to total cell-bound and extracellular microcystins.
Guideline Reference:	Guidelines for sage recreational water environments. Chapter 8: Algae and cyanobacteria in freshwater. Toxic Cyanobacteria in Water: A Guide to their Public Health Consequences, Monitoring and Management. World Health Organization. Edited by I. Chorus and J. Bartram. Long, England. 400 pp
Spatial Representation:	Data for this line of evidence was collected from a single sample location (305PINTO3s-Pinto Lake at the boat ramp - sub surface sample).
Temporal Representation:	Data was collected weekly by City of Watsonville Staff between 9/28/2006 and 1/10/2007.
Environmental Conditions:	Two different analytical test kits were used by City of Watsonville Staff to analyze Microcystin concentration in samples from Pinto Lake. Both Test kits use an Enzyme-Linked ImmunoSorbent Assay (ELISA) to determine microcystin toxin concentration. Samples collected prior to November 8, 2006 were analyzed using Qualitube ET-022, a semi-quantitative method that provides results in three categories (3.0ppb
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42408, Cyanobacteria hepatotoxic microcystins — Region 3

Pinto Lake

LOE ID:	79532
Pollutant:	Cyanobacteria hepatotoxic microcystins
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	14
Number of Exceedances:	13
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed City of Watsonville data and thirteen of the 14 samples exceed the evaluation guideline.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	USEPA Ten-day health advisory for bottle-fed infants and young children of pre-school age is 0.3 ug/L.
Guideline Reference:	Drinking Water Health Advisory for the Cyanobacterial Microcystin Toxins
Spatial Representation:	Data for this line of evidence was collected from a single sample location (305PINTO3s-Pinto Lake at the boat ramp - sub surface sample).
Temporal Representation:	Data was collected weekly by City of Watsonville Staff between 9/28/2006 and 1/10/2007.
Environmental Conditions:	
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42408, Cyanobacteria hepatotoxic microcystins — Region 3

Pinto Lake

LOE ID:	79534
Pollutant:	Cyanobacteria hepatotoxic microcystins
LOE Subgroup:	Adverse Biological Responses
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	14
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Water Board staff assessed City of Watsonville data and seven of the 14 samples exceed the evaluation guideline.
Data Reference:	Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data

SWAMP Data:

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	California Office of Environmental Health Hazard Assessment (OEHHA) established 0.8 ug/L as the water concentration that would theoretically expose the child swimmer to the dose identified as the maximum dose to which a person may be exposed with little to no risk of harm.
Guideline Reference:	Toxicological Summary and Suggested Action Levels to Reduce Potential Adverse Health Effects of Six Cyanotoxins
Spatial Representation:	Data for this line of evidence was collected from a single sample location (305PINTO3s-Pinto Lake at the boat ramp - sub surface sample).
Temporal Representation:	Data was collected weekly by City of Watsonville Staff between 9/28/2006 and 1/10/2007.
Environmental Conditions:	
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	

DECISION ID	**42265**	**Region 3**
Pinto Lake		

Pollutant:	**Scum/Foam-unnatural**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data are assessed. This decision has not changed from the 2010 listing cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 3.7.1 and 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Under Section 3.7.1 waters may be placed on the Section 303(d) list when a significant nuisance condition exists as compared to reference conditions.

A single line of evidence is available in the administrative record to assess this pollutant. Multiple photographs show the presence of algal scum on the surface of Pinto Lake. In addition, one photo shows staff wadding into the lake and algae sticking to the chest waders. The photo evidence clearly shows that algal blooms are a nuisance. In addition, Pinto lake is impaired for low dissolved oxygen, pH, elevated levels of suspended chlorophyll a and the presence of the Microcystin toxin.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Photo documentation clearly shows a nuisance condition resulting from the algal bloom in Pinto Lake.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42265, Scum/Foam-unnatural **Region 3**

Pinto Lake

LOE ID:	27033
Pollutant:	Scum/Foam-unnatural
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat | Wildlife Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Central Coast Waterboard Staff assessed photo documentation of algal blooms in Pinto Lake to determine beneficial use support. The WHO guidelines state that there is a high probability of adverse health effects from Â“cyanobacterial scum formation in areas where whole body contact and or risk of ingestion/aspiration occur.Â” Three photos in the administrative record demonstrate the severity of the algal scum in Pinto Lake in September 2005 and in October 2006. Data provided by the City of Watsonville also show elevated levels of blue green algae (or cyanobacteria) including Microcystis sp and its toxin Microcystin (see LOE #27034).
Data Reference:	Aerial photo showing algal bloom in Pinto lake Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Presentation slides showing Pinto Lake data Pinto Lake Algae Scum layer photo Pinto Lake Algae Scum photo 002 Photo showing staff retrieving a dead bird (American Coot) from Pinto Lake near the launch ramp. Pinto Lake water sample September 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective for all inland surface waters states that waters shall not contain floating material, including solids, liquids, foams and scum in concentrations that cause nuisance or adversely affect beneficial uses (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	The WHO guidelines state that there is a high probability of adverse health effects from Â“cyanobacterial scum formation in areas where whole body contact and or risk of ingestion/aspiration occur.Â”
Guideline Reference:	Guidelines for sage recreational water environments. Chapter 8: Algae and cyanobacteria in freshwater. Cyanobacteria in California Recreational Water Bodies. Providing Voluntary Guidance about Harmful Algal Blooms, Their Monitoring, and Public Notification. Draft. September 2008. Blue Green Algae Work Group of the State Water Resources Control Board, Department of Public Health, and Office of Environmental Health and Hazard Assessment Toxic Cyanobacteria in Water: A Guide to their Public Health Consequences, Monitoring and Management. World Health Organization. Edited by I. Chorus and J. Bartram. Long, England. 400 pp

Spatial Representation:	Information and photo documentation for this line of evidence was collected Pinto Lake at various locations and from various vantage points.
Temporal Representation:	Information was collected from January 2005 through December 2006.
Environmental Conditions:	Central Coast Waterboard Staff assessed photo documentation of algal blooms in Pinto Lake to determine beneficial use support. The WHO guidelines state that there is a high probability of adverse health effects from Â“cyanobacterial scum formation in areas where whole body contact and or risk of ingestion/aspiration occur.Â” The WHO guidelines also state the presence of algal and cyanobacteria scumÂ's (or detection of 100,000 cells/mL) are examples of Â“conditions that may result in a severe health outcome and thus merit a public health advisory.Â” Three photos in the administrative record demonstrate the severity of the algal scum in Pinto Lake in September 2005 and in October 2006. LOE # 27034 documents the presence of Microcystin toxin at concentrations above the Tolerable Daily Intake levels identified by the World Health Organization.
QAPP Information:	Photo Documentation is not typically covered under QAPPs
QAPP Information Reference(s):	

DECISION ID	40544	Region 3
Pinto Lake		

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Five lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-six of 133 samples exceed the Agricultural Supply water quality objective, 27 of the 133 samples exceed the Warm Freshwater Habitat water quality objective and 42 of 133 samples exceed the numeric objective for Municipal & Domestic Supply, Non-Contact Recreation and Water Contact Recreation. Each of these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40544, pH **Region 3**

Pinto Lake

LOE ID:	14812
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Agricultural Supply
Number of Samples:	133
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 26 of 133 samples exceed the criterion for pH.
Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3 (Central Coast Waterboard Basin Plan, Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries). In Table 3-3 of the Basin Plan (page III-8), water quality guidelines state that severe problems may occur when pH is greater than 8.4 or less than 6.5 in irrigation supply water.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

Line of Evidence (LOE) for Decision ID 40544, pH **Region 3**

Pinto Lake

LOE ID:	14813
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	133
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 27 of 133 samples exceed the criterion for pH.
Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Municipal and Domestic Supply Objectives, Section II.A.2.a states the following: The pH value shall neither be depressed below 6.5 or raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

Line of Evidence (LOE) for Decision ID 40544, pH **Region 3**

Pinto Lake

LOE ID:	14830
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	133
Number of Exceedances:	42
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 42 of 133 samples exceed the criterion for pH.
Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3

	Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]
Temporal Representation:	Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

Line of Evidence (LOE) for Decision ID 40544, pH **Region 3**

Pinto Lake

LOE ID:	14814
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	133
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 27 of 133 samples exceed the criterion for pH.
Data Reference:	Photo showing algae #1 Photo showing algae #2 Photo showing algae #3 Site Map - Pinto Lake aerial Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]

Temporal Representation: Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.

QAPP Information Reference(s): e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

Line of Evidence (LOE) for Decision ID 40544, pH **Region 3**

Pinto Lake

LOE ID: 14829

Pollutant: pH
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Non-Contact Recreation

Number of Samples: 133
Number of Exceedances: 27

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed City of Watsonville Monitoring at Pinto Lake (PintoLake) data for Pinto Lake to determine beneficial use support and results are as follows: 27 of 133 samples exceed the criterion for pH.

Data Reference:
Photo showing algae #1
Photo showing algae #2
Photo showing algae #3
Site Map - Pinto Lake aerial
Final Data File used for assessment: Mutiple data sets, City of Santa Maria, Watsonville and Santa Barbara Channel Keeper Data

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pinto Lake was collected at 9 monitoring sites [305PNTO3s - Pinto Lake - South near docks - surface, 305PNTO1m - Pinto Lake - West Arm - mid water column depth, 305PNTO1b - Pinto Lake - West Arm - bottom depth, 305PNTO1s - Pinto Lake - West Arm - surface depth, 305PNTO2b - Pinto Lake - Center - bottom depth, 305PNTO2s - Pinto Lake - Center - surface depth, 305PNTO2m - Pinto Lake - Center - mid water column depth, 305PNTO3m - Pinto Lake - South near docks - middle of water column, 305PNTO3b - Pinto Lake - South near docks - bottom]

Temporal Representation: Data was collected over the time period 6/10/2005-5/22/2006. City of Watsonville monitoring at Pinto Lake was conducted monthly.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Grab samples are analyzed at a ELAP certified laboratory and follows the laboratory QAPP.
QAPP Information Reference(s):	e-mail stating no QAPP but all analysis is conducted at ELAP certified laboratory

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Schwan Lake**
Water Body ID: **CAL30412053199812091021 56**
Water Body Type: **Lake & Reservoir**

DECISION ID	38035	Region 3
Schwan Lake		

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

No new data were assessed.

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Three of the 8 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Three of the 8 samples exceeded the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38035, Oxygen, Dissolved	Region 3
Schwan Lake	

LOE ID:	19852
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 3 of 8 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 5/14/1992-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38035, Oxygen, Dissolved **Region 3**

Schwan Lake

LOE ID:	19912
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health

	Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 5/14/1992-5/27/1993.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**38073**	**Region 3**
Schwan Lake		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 2 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 2 samples exceed the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38073, Turbidity — Region 3

Schwan Lake

LOE ID:	19384
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 10/16/2002-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID 38074 — Region 3

Schwan Lake

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Two of the 8 samples exceed the Recreation use water quality objectives and none of the 8 samples exceed the Warm Freshwater Habitat water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of the 8 samples exceed the Recreation use water quality objectives and none of the 8 samples exceed the Warm Freshwater Habitat water quality objective and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38074, pH **Region 3**

Schwan Lake

LOE ID:	19839
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]

Temporal Representation:	Data was collected over the time period 5/14/1992-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38074, pH **Region 3**

Schwan Lake

LOE ID:	19837
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 5/14/1992-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38074, pH **Region 3**

Schwan Lake

LOE ID:	19838
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 2 of 8 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 5/14/1992-10/24/2002.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	37739	Region 3
Schwan Lake		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. No new data were assessed. The sample size for the evaluation guideline for non-contact recreation for Escherichia coli (E. coli) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Three lines of evidence are available in the administrative record to assess this pollutant. Seven of 8 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 8 samples exceed the

water quality objective for non-contact recreation. LOE 4012 is a placeholder reference for assessments made prior to the 2006 listing cycle. Data from this LOE for "pathogens" are captured in LOE 19843.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of 8 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37739, Escherichia coli (E. coli) **Region 3**

Schwan Lake

LOE ID:	19844
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	8
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 0 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 2/5/2001-2/28/2005.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37739, Escherichia coli (E. coli) **Region 3**

Schwan Lake

LOE ID:	4012
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37739, Escherichia coli (E. coli) **Region 3**

Schwan Lake

LOE ID:	19843
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	8
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 7 of 8 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996

	Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 2/5/2001-2/28/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	**37740**	**Region 3**
Schwan Lake		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Twenty-two of 30 samples exceed the evaluation guideline for contact recreation (i.e. swimming, wading etc.) and 1 of 30 samples exceed the water quality objective for non-contact recreation. LOE 4012 is a placeholder reference for assessments that were made prior to the 2006 listing cycle. Data from this LOE for "pathogens" is captured in LOE 18791. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-two of 30 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37740, Fecal Coliform — Region 3

Schwan Lake

LOE ID:	18805
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 2/5/1990-12/16/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37740, Fecal Coliform — Region 3

Schwan Lake

LOE ID:	4012
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37740, Fecal Coliform **Region 3**

Schwan Lake

LOE ID:	18791
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	30
Number of Exceedances:	22
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 22 of 30 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 2/5/1990-12/16/1991.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to

	protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

DECISION ID	37547	Region 3
Schwan Lake		

Pollutant:	**Nutrients**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37547, Nutrients	Region 3
Schwan Lake	

LOE ID:	4011
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	38050	Region 3
Schwan Lake		

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Six of 6 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six of 6 samples exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38050, Total Coliform	**Region 3**
Schwan Lake	

LOE ID:	19762
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Santa Cruz County Environmental Health Monitoring Program (R3_SCCEH) data for Schwann Lake to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: Santa Cruz County Environmental Health data 1971-1996 Final Data File used for assessment: Santa Cruz County Environmental Health data 1997-

	2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Schwann Lake was collected at 1 monitoring site [304SCL_SCC - SCHWAN LAKE at MOUTH]
Temporal Representation:	Data was collected over the time period 2/5/2001-2/28/2005.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	This monitoring program has been underway for thirty years, with changes over time to protocols, level of QA, and documentation. In general, QA documentation included with the dataset is minimal. However, data quality appears to be reasonably good.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Loch Lomond**
Water Body ID: **CAL30412031200201241627 01**
Water Body Type: **Lake & Reservoir**

DECISION ID **51449** **Region 3**
Loch Lomond

Pollutant: **Aldrin**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51449, Aldrin **Region 3**
Loch Lomond

LOE ID: 54745

Pollutant: Aldrin
LOE Subgroup: Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51449, Aldrin **Region 3**

Loch Lomond

LOE ID:	54744

Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51451** **Region 3**

Loch Lomond

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51451, Chlordane **Region 3**

Loch Lomond

LOE ID:	54660
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One

	of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51451, Chlordane **Region 3**

Loch Lomond

LOE ID:	54659
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51451, Chlordane **Region 3**

Loch Lomond

LOE ID:	54655
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51462**	**Region 3**
Loch Lomond		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51462, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Loch Lomond

LOE ID:	54733
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51462, DDT (Dichlorodiphenyltrichloroethane) Region 3

Loch Lomond

LOE ID:	54732
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'-

	isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51462, DDT (Dichlorodiphenyltrichloroethane) Region 3

Loch Lomond

LOE ID:	54726
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details

	of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total DDT was calculated as the sum of 4,4'- and 2,4'-isomers of DDT, DDE, and DDD.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51452**	**Region 3**
Loch Lomond		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single

fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51452, Dieldrin **Region 3**

Loch Lomond

LOE ID:	54668
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51452, Dieldrin **Region 3**

Loch Lomond

LOE ID:	54667
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation

	screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51452, Dieldrin **Region 3**

Loch Lomond

LOE ID:	54677
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Dieldrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA

	Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51453**	**Region 3**
Loch Lomond		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51453, Endrin **Region 3**

Loch Lomond

LOE ID:	54682
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51453, Endrin **Region 3**

Loch Lomond

LOE ID:	54678
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51453, Endrin **Region 3**

Loch Lomond

LOE ID:	54683
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51454**	**Region 3**
Loch Lomond		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51454, Heptachlor **Region 3**

Loch Lomond

LOE ID:	54685
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in

	the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51454, Heptachlor **Region 3**

Loch Lomond

LOE ID:	54684
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were

	collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51455**	**Region 3**
Loch Lomond		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51455, Heptachlor epoxide **Region 3**

Loch Lomond

LOE ID:	54689
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods

	described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51455, Heptachlor epoxide **Region 3**

Loch Lomond

LOE ID:	54687
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51455, Heptachlor epoxide **Region 3**

Loch Lomond

LOE ID:	54686
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs,

	Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID 51456 Region 3

Loch Lomond

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51456, Hexachlorobenzene/ HCB Region 3

Loch Lomond

LOE ID:	54690
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID **51457** **Region 3**

Loch Lomond

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51457, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) — Region 3

Loch Lomond

LOE ID:	54695
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth bass.

	Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51457, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Loch Lomond

LOE ID:	54702
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51457, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Loch Lomond

LOE ID:	54696
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51458**	**Region 3**
Loch Lomond		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision

Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51458, Mercury **Region 3**

Loch Lomond

LOE ID:	54703
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury. Sixteen composite (5 fish per composite) was generated from one species: largemouth bass. Two composites could not be used in the assessment due to total fish lengths that did not fall within lengths noted in the guideline. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008

	Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51459**	**Region 3**
Loch Lomond		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of zero fish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51459, Mirex **Region 3**

Loch Lomond

LOE ID:	54709
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This

	screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51460**	**Region 3**
Loch Lomond		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51460, PCBs (Polychlorinated biphenyls) **Region 3**

Loch Lomond

LOE ID:	54719
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were

	collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51460, PCBs (Polychlorinated biphenyls) **Region 3**

Loch Lomond

LOE ID:	54710
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency

Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51460, PCBs (Polychlorinated biphenyls) **Region 3**

Loch Lomond

LOE ID:	54718
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009). Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.

Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	**51461**	**Region 3**
Loch Lomond		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51461, Selenium **Region 3**

Loch Lomond

LOE ID:	54725
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan

QAPP Information Reference(s):	"Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008). Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

DECISION ID	51450	Region 3
Loch Lomond		

Pollutant:	**alpha-Endosulfan (Endosulfan 1)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use, nor did the single fish tissue sample exceed the evaluation guideline applied to protect for the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51450, alpha-Endosulfan (Endosulfan 1)	**Region 3**
Loch Lomond	

LOE ID:	54747
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51450, alpha-Endosulfan (Endosulfan 1) **Region 3**

Loch Lomond

LOE ID:	54654
Pollutant:	alpha-Endosulfan (Endosulfan 1)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

Line of Evidence (LOE) for Decision ID 51450, alpha-Endosulfan (Endosulfan 1) **Region 3**

Loch Lomond

LOE ID:	54746
Pollutant:	alpha-Endosulfan (Endosulfan 1)

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed SWAMP data for Loch Lomond to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (5 fish per composite) was generated from one species: largemouth bass. Details of the compositing protocol can be found in the March 2009 report entitled: "Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Study" (SWAMP, 2009).
Data Reference:	Contaminants in Fish from California Lakes and Reservoirs: Technical Report on Year One of a Two-Year Screening Survey. A Report of the Surface Water Ambient Monitoring Program (SWAMP). California State Water Resources Control Board, Sacramento, CA Statewide Lakes Sportfish Contamination Study 2007 2008 Contaminants in Fish from California Lakes and Reservoirs, 2007-2008: Summary Report on a Two-Year Screening Survey Cruise report for the Surface Water Ambient Monitoring Program (SWAMP) bioaccumulation screening study in California lakes and reservoirs year two (FY 07-08). Sampling dates: April 2008 - November 2008.
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (Water Quality Control Plan, Central Coast Region)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Loch Lomond was collected at 1 monitoring site [Loch Lomond Reservoir - 304PLL184]. Samples were collected from 1 location. Individual sample locations consisted of an area within a given waterbody from which fish tissue samples were collected. The number of sample locations per waterbody was based on the overall size of the waterbody (SWAMP, 2010). Specifics of individual sampling locations can be found in the supplemental report entitled "Cruise Report for the Surface Waters Ambient Monitoring Program (SWAMP) Bioaccumulation Screening Study in California Lakes and Reservoirs, Sampling Dates: April 2008-November 2008" (SWAMP, 2009).
Temporal Representation:	Data was collected on a single day 4/9/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan Samples were collected, processed, and analyzed in accordance with the methods described in Quality Assurance Project Plan "Screening Study of Bioaccumulation in California Lakes and Reservoirs." (SWAMP, 2008).
QAPP Information Reference(s):	Quality Assurance Project Plan Screening Study of Bioaccumulation in California Lakes and Reservoirs. Moss Landing Marine Labs. Prepared for SWAMP BOG, 49 pages plus appendices and attachments

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Carpinteria Marsh (El Estero)**
Water Body ID: **CAE315340201998082716514 4**
Water Body Type: **Estuary**

DECISION ID **34000** **Region 3**
Carpinteria Marsh (El Estero)

Pollutant:	**Nutrients**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34000, Nutrients **Region 3**
Carpinteria Marsh (El Estero)

LOE ID:	3936
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified

Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 34059 **Region 3**

Carpinteria Marsh (El Estero)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34059, Oxygen, Dissolved **Region 3**

Carpinteria Marsh (El Estero)

LOE ID:	3937
Pollutant:	Organic Enrichment/Low Dissolved Oxygen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified

Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 33821 Region 3

Carpinteria Marsh (El Estero)

Pollutant:	**Priority Organics**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a CWA section 303(d) Listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33821, Priority Organics Region 3

Carpinteria Marsh (El Estero)

LOE ID:	3938
Pollutant:	Priority Organics
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified

QAPP Information: Unspecified
QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Goleta Slough/Estuary**
Water Body ID: **CAE31531020199812091413 09**
Water Body Type: **Estuary**

DECISION ID **39657** **Region 3**
Goleta Slough/Estuary

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Natural Sources | Source Unknown | Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed. Notes from the paper files indicate that this listing was made based on bacteria data from the 1980's provided by the California Department of Health Services but there is no record of that data on file. The pollutant name has been changed from Pathogens to Indicator Bacteria.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39657, Indicator Bacteria **Region 3**
Goleta Slough/Estuary

LOE ID:	3949
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID **39541** **Region 3**

Goleta Slough/Estuary

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the two previously approved decisions, one for each of the pollutants unionized ammonia and total ammonia. This decision contains all of the LOEs from those decisions in addition to new LOEs. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for unionized ammonia set to protect aquatic life. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39541, Ammonia **Region 3**

Goleta Slough/Estuary

LOE ID:	10550
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40404** **Region 3**

Goleta Slough/Estuary

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample did not exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the

General Water Quality Objective set to protect aquatic life beneficial uses.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The single sample did not exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40404, Chlorophyll-a **Region 3**

Goleta Slough/Estuary

LOE ID:	10551
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

Carolina Administrative Code subchapter 2B - Surface water and wetland standards

Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 40389 Region 3
Goleta Slough/Estuary

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample exceed the water quality objective for contact recreation (i.e. swimming) but did not exceed the water quality objective for non-contact recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single sample exceed the water quality objective for contact recreation (i.e. swimming) but did not exceed the water quality objective for non-contact recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40389, Fecal Coliform Region 3
Goleta Slough/Estuary

LOE ID:	12317
Pollutant:	Fecal Coliform

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40389, Fecal Coliform **Region 3**

Goleta Slough/Estuary

LOE ID:	12316
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40390**	**Region 3**
Goleta Slough/Estuary		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single sample did not exceed the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Additionally, the Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Warm Freshwater Habitats. Therefore, the saturation data is used only as supporting information and the use support rating for this pollutant is set at insufficient information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample did not exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40390, Oxygen, Dissolved **Region 3**

Goleta Slough/Estuary

LOE ID:	14159
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40390, Oxygen, Dissolved **Region 3**

Goleta Slough/Estuary

LOE ID:	14098
Pollutant:	Oxygen, Dissolved

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**40391**	**Region 3**
Goleta Slough/Estuary		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single sample exceeds the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single sample exceeds the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40391, Turbidity **Region 3**

Goleta Slough/Estuary

LOE ID:	14176
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40406** **Region 3**

Goleta Slough/Estuary

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. The sample did not exceed the water quality objectives for Warm Freshwater Habitat, Water Contact Recreation or Non-Contact Recreation. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The sample did not exceed the water quality objectives for Warm Freshwater Habitat, Water Contact Recreation or Non-Contact Recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40406, pH **Region 3**

Goleta Slough/Estuary

LOE ID:	12333
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5

	nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40406, pH **Region 3**

Goleta Slough/Estuary

LOE ID:	12334
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40406, pH **Region 3**

Goleta Slough/Estuary

LOE ID:	12318
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Goleta SloughEstuary to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Goleta SloughEstuary was collected at 1 monitoring site [315GOS-Goleta Slough at the Airport]
Temporal Representation:	Data was collected on a single day 3/7/2001. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**34036**	**Region 3**
Goleta Slough/Estuary		

Pollutant:	**Priority Organics**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a CWA section 303(d) Listing made in a previous assessment cycle. The

	Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34036, Priority Organics **Region 3**

Goleta Slough/Estuary

LOE ID:	3950
Pollutant:	Priority Organics
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Not Recorded
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Santa Maria River Estuary**
Water Body ID: **CAE3121003020020311125938**
Water Body Type: **Estuary**

DECISION ID **51702** **Region 3**
Santa Maria River Estuary

Pollutant: **Alachlor**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty water samples exceed the evaluation guideline applied to protect for aquatic life beneficial uses. Zero of the thirty water samples exceed the evaluation guideline applied to protect for the municipal beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51702, Alachlor **Region 3**
Santa Maria River Estuary

LOE ID: 58204

Pollutant: Alachlor
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51702, Alachlor **Region 3**

Santa Maria River Estuary

LOE ID:	58203
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Alachlor is 0.002 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51717** **Region 3**

Santa Maria River Estuary

Pollutant:	**Atrazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the aquatic life evaluation guideline. Zero out of thirty water samples exceeded the evaluation guideline applied to protect the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51717, Atrazine **Region 3**

Santa Maria River Estuary

LOE ID:	58206
Pollutant:	Atrazine

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for atrazine is 0.001 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51717, Atrazine **Region 3**

Santa Maria River Estuary

LOE ID:	58210
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic

	life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life 50% effect concentration (EC50) for Atrazine is 43 ug/L based on a 14 day toxicity study of Duckweed (Lemna gibba).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51585**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the estuarine beneficial uses. Zero out of zero samples exceeded the evaluation guideline applied to protect for the aquatic life beneficial uses. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of seventeen sediment samples exceeded the aquatic life evaluation guideline. A total of 24 samples were collected, however 7 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. For the aquatic life beneficial uses in water only, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51585, Bifenthrin **Region 3**

Santa Maria River Estuary

LOE ID:	58213
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for BIFENTHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The genus mean acute value for a mysid (Mysidopsis bahia) of 0.0034 ug/L (DFG 00-6, 2000).
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response, Administrative Report 00-6
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51585, Bifenthrin **Region 3**

Santa Maria River Estuary

LOE ID:	58218

Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for BIFENTHRIN. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51585, Bifenthrin **Region 3**

Santa Maria River Estuary

LOE ID:	58212
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 7 of the non-detect sample results were compared to the evaluation guideline and

	the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 17 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**51723**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Butylate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of 150 water samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of 150 water samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51723, Butylate **Region 3**

Santa Maria River Estuary

LOE ID:	58220
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	150
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 150 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51795	Region 3
Santa Maria River Estuary		

Pollutant:	**Carbaryl**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Two out of thirty water samples exceeded the aquatic life evaluation guideline. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of thirty water samples exceeded the aquatic life evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51795, Carbaryl	**Region 3**
Santa Maria River Estuary	

LOE ID:	58232
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51795, Carbaryl **Region 3**

Santa Maria River Estuary

LOE ID:	58231
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for carbaryl is 40 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s): Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	51797	Region 3
Santa Maria River Estuary		

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the aquatic life evaluation guideline. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline for aquatic life and zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51797, Carbofuran	**Region 3**
Santa Maria River Estuary	

LOE ID:	58234
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for

	CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for carbofuran is 18 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51797, Carbofuran **Region 3**

Santa Maria River Estuary

LOE ID:	58235
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51804 Region 3

Santa Maria River Estuary

Pollutant:	**Chlorothalonil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51804, Chlorothalonil Region 3

Santa Maria River Estuary

LOE ID:	58246
Pollutant:	Chlorothalonil
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Chlorothalonil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the 2006 USEPA Drinking Water Standards and Health Advisories, the Ten-day Health Advisory for Chlorothalonil is 200 ug/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51586**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero out of twenty sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. A total of 24 samples were collected, however 4 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of twenty sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51586, Cyfluthrin **Region 3**

Santa Maria River Estuary

LOE ID:	58261
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 4 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 20 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **51587** **Region 3**

Santa Maria River Estuary

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of fifteen sediment samples exceeded the aquatic life evaluation guideline. A total of 24 samples were collected, however 9 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51587, Cyhalothrin, Lambda **Region 3**

Santa Maria River Estuary

LOE ID: 58273

Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 9 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 15 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51587, Cyhalothrin, Lambda **Region 3**

Santa Maria River Estuary

LOE ID:	58274
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyhalothrin, lambda, total. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51588** **Region 3**

Santa Maria River Estuary

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of thirty water samples exceeded the evaluation guideline applied to protect the estuarine habitat beneficial use. Zero out of fourteen sediment samples exceeded the aquatic life evaluation guideline. A total of 24 samples were collected, however 10 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the

Listing Policy.

With the exception of the estuarine habitat, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51588, Cypermethrin **Region 3**

Santa Maria River Estuary

LOE ID:	58286
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for CYPERMETHRIN. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.

Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51588, Cypermethrin **Region 3**

Santa Maria River Estuary

LOE ID:	58284
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 10 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 14 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]

Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51588, Cypermethrin **Region 3**

Santa Maria River Estuary

LOE ID:	58285
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CYPERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The genus mean acute value for a grass shrimp (Palaemonetes pugio) of 0.016 ug/L (DFG 00-6, 2000).
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response, Administrative Report 00-6
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **53050** **Region 3**

Santa Maria River Estuary

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Five LOEs summarize data for the DDT isomer and one LOE summarized data for total DDT (the sum of all isomers). Zero of the 30 DDT isomer water samples exceed the evaluation guideline for protection of Estuarine Habitats. Zero of the 24 sediment samples exceeded the evaluation guidelines for aquatic life. Evaluation guidelines for water samples and protection of Municipal and Domestic Supply, Commercial and Recreational Fishing and Shellfishing, and Warm Freshwater Habitats were higher than the reporting limits for all water samples and the DDT was not detected in those samples. Therefore the sample and exceedance counts are listed as zero for those LOEs. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 30 DDT isomer water samples exceed the evaluation guideline for protection of Estuarine Habitats. Zero of the 24 sediment samples exceeded the evaluation guidelines for aquatic life. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53050, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Santa Maria River Estuary

LOE ID:	58311
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53050, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River Estuary

LOE ID:	58322
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DDT(p,p).
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in saline water is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP

	format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53050, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River Estuary

LOE ID:	58325
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53050, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River Estuary

LOE ID:	58328
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53050, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River Estuary

LOE ID:	58312
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Thirty sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be

	quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53050, DDT (Dichlorodiphenyltrichloroethane) Region 3

Santa Maria River Estuary

LOE ID:	58323
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Thirty sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criteria for the protection of human health from consumption of organisms only is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]

Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51589 Region 3

Santa Maria River Estuary

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 30 water samples exceed the evaluation guidelines for drinking water and aquatic life uses. In addition, zero of the 17 sediment samples exceed the evaluation guideline used to interpret the narrative water quality objective for aquatic life. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against adding this water segment-pollutant combination from the section 303(d) list. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the samples exceed the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51589, Deltamethrin Region 3

Santa Maria River Estuary

LOE ID:	58333
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51589, Deltamethrin **Region 3**

Santa Maria River Estuary

LOE ID:	58335
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 7 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 17 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**51872**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51872, Disulfoton **Region 3**

Santa Maria River Estuary

LOE ID:	58355
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DISULFOTON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51590** **Region 3**

Santa Maria River Estuary

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of twenty-one sediment samples exceeded the aquatic life evaluation guideline. A total of 24 samples were collected, however 3 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51590, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River Estuary

LOE ID:	58356
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51590, Esfenvalerate/Fenvalerate **Region 3**

Santa Maria River Estuary

LOE ID:	58191
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 3 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Three of the remaining 21 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring

	sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 51591 Region 3

Santa Maria River Estuary

Pollutant:	**Ethalfluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the protection of aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51591, Ethalfluralin Region 3

Santa Maria River Estuary

LOE ID:	58192
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 1.4 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L as determined in a 50 day toxicity study with the Bluegill sunfish, Lepomis macrochirus. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51594**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of twenty sediment samples exceeded the aquatic life evaluation guideline. A total of 24 samples were collected, however 4 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be

quantified with the level of certainty required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51594, Fenpropathrin **Region 3**

Santa Maria River Estuary

LOE ID:	58200
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP

	Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51594, Fenpropathrin **Region 3**

Santa Maria River Estuary

LOE ID:	58199
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 4 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 20 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 51964 **Region 3**

Santa Maria River Estuary

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

One line of evidence is available in the administrative record to assess this pollutant. Zero out of ten sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. A total of 24 samples were collected, however 14 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of ten sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51964, Fipronil — Region 3

Santa Maria River Estuary

LOE ID:	58207
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 14 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 10 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**51971**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero out of ten sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. A total of 24 samples were collected, however 14 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial

use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of ten sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51971, Fipronil Sulfide **Region 3**

Santa Maria River Estuary

LOE ID:	58208
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 14 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 10 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16

	ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	51977	Region 3
Santa Maria River Estuary		

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. One line of evidence is available in the administrative record to assess this pollutant. Zero out of ten sediment samples exceeded the evaluation guideline for the aquatic life beneficial use. A total of 24 samples were collected, however 14 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of nine sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and

information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51977, Fipronil Sulfone **Region 3**

Santa Maria River Estuary

LOE ID:	58209
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 14 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 10 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID **51986** **Region 3**

Santa Maria River Estuary

Pollutant:	**Hexazinone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51986, Hexazinone — Region 3

Santa Maria River Estuary

LOE ID:	58214
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L based on a 120 hour toxicity study of green algae (selenastrum capricornutum).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51989**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Iprodione**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51989, Iprodione	**Region 3**
Santa Maria River Estuary	

LOE ID:	58216
Pollutant:	Iprodione
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Iprodione.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Iprodione is 280 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water with 0.04 mg/kg/day as the reference dose. An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Summary for Iprodione
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52042**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of

thirty water samples exceeded the evaluation guideline for the municipal beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52042, Methidathion **Region 3**

Santa Maria River Estuary

LOE ID:	58225
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses

Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52042, Methidathion **Region 3**

Santa Maria River Estuary

LOE ID:	58224
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52058** **Region 3**

Santa Maria River Estuary

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial uses. Zero out of twenty-four sediment samples exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty water and zero out of twenty-four sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52058, Methyl Parathion **Region 3**

Santa Maria River Estuary

LOE ID:	58237
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Parathion, methyl.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phorate is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52058, Methyl Parathion **Region 3**

Santa Maria River Estuary

LOE ID:	58238
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring

	sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52058, Methyl Parathion **Region 3**

Santa Maria River Estuary

LOE ID:	58249
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	52064	Region 3
Santa Maria River Estuary		

Pollutant:	**Molinate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52064, Molinate	**Region 3**
Santa Maria River Estuary	

LOE ID:	58251
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52064, Molinate **Region 3**

Santa Maria River Estuary

LOE ID:	58250
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for molinate is 20 ug/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52066 Region 3

Santa Maria River Estuary

Pollutant:	**Napropamide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52066, Napropamide Region 3

Santa Maria River Estuary

LOE ID:	58262
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52102**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Pentachlorobenzene (PCNB)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52102, Pentachlorobenzene (PCNB) **Region 3**

Santa Maria River Estuary

LOE ID:	58264
Pollutant:	Pentachlorobenzene (PCNB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PCNB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services archived Advisory Level for Pentachloronitrobenzene is 20 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51595** **Region 3**

Santa Maria River Estuary

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of twenty-four sediment samples exceeded the aquatic life evaluation guideline. For water samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51595, Permethrin, total **Region 3**

Santa Maria River Estuary

LOE ID:	58265
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51595, Permethrin, total **Region 3**

Santa Maria River Estuary

LOE ID:	58276
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for PERMETHRIN. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered

	in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52169 Region 3

Santa Maria River Estuary

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52169, Phosmet Region 3

Santa Maria River Estuary

LOE ID:	58278
Pollutant:	Phosmet

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52169, Phosmet **Region 3**

Santa Maria River Estuary

LOE ID:	58287
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52288**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Prometryn**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52288, Prometryn — Region 3

Santa Maria River Estuary

LOE ID:	58290
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for prometryn is 28 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52288, Prometryn — Region 3

Santa Maria River Estuary

LOE ID:	58289
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52292**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Propanil (DCPA mono- and di-acid degrad)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52292, Propanil (DCPA mono- and di-acid degrad) **Region 3**

Santa Maria River Estuary

LOE ID:	58301
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.6 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L, as determined in a 60 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52299** **Region 3**

Santa Maria River Estuary

Pollutant: **Propiconazole**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52299, Propiconazole **Region 3**

Santa Maria River Estuary

LOE ID:	58303
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L) based on a 96 toxicity study of Rainbow trout (Oncorhynchus mykiss).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52303 Region 3

Santa Maria River Estuary

Pollutant:	**Resmethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52303, Resmethrin Region 3

Santa Maria River Estuary

LOE ID:	58313
Pollutant:	Resmethrin

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for RESMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Resmethrin is 210 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52308**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Simazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52308, Simazine **Region 3**

Santa Maria River Estuary

LOE ID:	58314
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for simazine is 0.004 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52308, Simazine **Region 3**

Santa Maria River Estuary

LOE ID:	58315
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52310** **Region 3**

Santa Maria River Estuary

Pollutant:	**Thiobencarb/Bolero**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52310, Thiobencarb/Bolero **Region 3**

Santa Maria River Estuary

LOE ID:	58327
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.0 ug/L and the no observed effect concentration (NOEC) of 1.0 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper -

	312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52310, Thiobencarb/Bolero **Region 3**

Santa Maria River Estuary

LOE ID:	58317
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for thiobencarb is 0.07 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52315** **Region 3**

Santa Maria River Estuary

Pollutant:	**Trifluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52315, Trifluralin **Region 3**

Santa Maria River Estuary

LOE ID:	58339
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.18 ug/L and the no observed effect concentration (NOEC) of 1.14 ug/L as determined in

	a 48 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52320** **Region 3**

Santa Maria River Estuary

Pollutant:	**Vinclozolin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52320, Vinclozolin **Region 3**

Santa Maria River Estuary

LOE ID:	58349

Pollutant:	Vinclozolin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Vinclozolin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Vinclozolin is 180 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **53053** **Region 3**

Santa Maria River Estuary

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Fifteen of the 27 samples exceed the water quality objective for aquatic life uses and 19 of 27 samples exceed the water quality objectives for recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of the 27 samples exceed the water quality objective for aquatic life uses and 19 of 27 samples exceed the water quality objectives for recreation. These exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53053, pH **Region 3**

Santa Maria River Estuary

LOE ID:	47885
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 19 of 27 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower, Santa Maria River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 10:00:00 AM-10/29/2009 10:04:41 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53053, pH **Region 3**

Santa Maria River Estuary

LOE ID:	47886
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 15 of 27 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower, Santa Maria River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 10:00:00 AM-10/29/2009 10:04:41 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53053, pH **Region 3**

Santa Maria River Estuary

LOE ID:	47884
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	19
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 19 of 27 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower, Santa Maria River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 10:00:00 AM-10/29/2009 10:04:41 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID	**48230**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Five lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty samples exceed the USEPA drinking water health advisory and this use rating is set at fully supporting. However,24 of 30 water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial uses and 27 of 30 water samples exceed the evaluation guideline (Siepmann and Finalyson, 2000) applied to protect for aquatic life beneficial uses in the estuarine environment. In addition, three of twenty-one sediment samples exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007) and these samples also resulted in a toxic effect to test organisms. This water segment is also on the CWA section 303(d) List for sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.
This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twenty-four of 30 water samples exceed the evaluation guideline for aquatic life beneficial uses; 27 of 30 water samples exceed the evaluation guideline for saltwater aquatic organisms; and three of 21 sediment samples exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007) and

resulted in toxic effects to test organisms. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 48230, Chlorpyrifos **Region 3**

Santa Maria River Estuary

LOE ID:	58247
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 3 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Three of the remaining 21 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River

	Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 48230, Chlorpyrifos **Region 3**

Santa Maria River Estuary

LOE ID:	58248
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	24
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 24 of 30 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48230, Chlorpyrifos **Region 3**

Santa Maria River Estuary

LOE ID:	58259

Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	27
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 27 of 30 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The saltwater criterion continuous concentration to protect aquatic organisms is 0.009 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48230, Chlorpyrifos **Region 3**

Santa Maria River Estuary

LOE ID:	58260
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CHLORPYRIFOS.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 48230, Chlorpyrifos **Region 3**

Santa Maria River Estuary

LOE ID:	80349
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	11
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-four samples were collected during three sampling events that each included eight stations to evaluate sediment toxicity. Twelve of the 24 samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival and growth were observed in the following samples: at station 312SMESD1 on 10/29/09, at station 312SMESD2 on 10/29/09, at station 312SMESD5 on 10/15/08, and 10/29/09, at station 312SMESD6 on 5/28/08 and 10/15/08, at 312SMESD7 on 10/15/08 and 10/29/09 and at 312SMESD8 on 5/28/08, 10/15/08 and 10/29/09.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if

	there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at eight Santa Maria River Estuary stations (312SMESD1, 312SMESD2, 312SMESD3, 312SMESD4, 312SMESD5, 312SMESD6, 312SMESD7, 312SMESD8).
Temporal Representation:	The samples were collected in May, and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**53047**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Two of the two water samples exceed the evaluation guidelines used to protect for consumption of fish and shellfish and for protection of domestic and municipal supply (water). These uses are not supported because of elevated DDD concentrations in the water column. Conversely, zero of the 24 sediment samples exceeded the evaluation guideline use to protect aquatic life and this use rating is set to fully supporting. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the two water samples exceed the evaluation guidelines used to protect for consumption of fish and shellfish and for protection of domestic and municipal supply (water). These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. The Santa Maria River Watershed Toxicity and Pesticide TMDL was approved by USEPA on August 31, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality

standards are exceeded and a pollutant contributes to or causes the problem. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 53047, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River Estuary

LOE ID:	58300
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53047, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River Estuary

LOE ID:	58298

Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDD(p,p). Twenty-eight sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00083 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53047, DDD (Dichlorodiphenyldichloroethane) Region 3

Santa Maria River Estuary

LOE ID:	58299
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 2 of 2 samples exceed the criterion for DDD(p,p). Twenty-eight sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD criteria for the protection of human health from consumption of organisms only is 0.00084 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**53048**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. All 21 water samples exceed the evaluation guidelines used for protection of domestic and municipal supply (drinking water). Six of the 24 sediment samples exceeded the evaluation guideline use to protect aquatic life and these samples also resulted in a toxic effect to test organisms. In addition, this water segment is on the CWA section 303(d) List for sediment toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All 21 water samples exceed the evaluation guidelines used for protection of domestic and municipal supply (drinking water). Six of the 24 sediment samples exceeded the evaluation guideline use to protect aquatic life and these samples also resulted in a toxic effect to test organisms. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticide TMDL was approved by USEPA on August 31, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

Line of Evidence (LOE) for Decision ID 53048, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Santa Maria River Estuary

LOE ID:	58310
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 6 of 24 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53048, DDE (Dichlorodiphenyldichloroethylene) **Region 3**

Santa Maria River Estuary

LOE ID:	80349
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	11
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-four samples were collected during three sampling events that each included eight stations to evaluate sediment toxicity. Twelve of the 24 samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival and growth were observed in the following samples: at station 312SMESD1 on 10/29/09, at station 312SMESD2 on 10/29/09, at station 312SMESD5 on 10/15/08, and 10/29/09, at station 312SMESD6 on 5/28/08 and 10/15/08, at 312SMESD7 on 10/15/08 and 10/29/09 and at 312SMESD8 on 5/28/08, 10/15/08 and 10/29/09.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at eight Santa Maria River Estuary stations (312SMESD1, 312SMESD2, 312SMESD3, 312SMESD4, 312SMESD5, 312SMESD6, 312SMESD7, 312SMESD8).
Temporal Representation:	The samples were collected in May, and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53048, DDE (Dichlorodiphenyldichloroethylene) Region 3

Santa Maria River Estuary

LOE ID:	58309
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	21

Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 21 of 21 samples exceed the criterion for DDE(p,p). Nine sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDE(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **47245** **Region 3**

Santa Maria River Estuary

Pollutant:	**Diazinon**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Twelve of thirty samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the thirty samples exceed the USEPA drinking water health advisory. Zero of twenty-four sediment samples exceeded the aquatic life evaluation guideline (Ding et al. 2011). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has

been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Twelve of 30 samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy.

4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 47245, Diazinon **Region 3**

Santa Maria River Estuary

LOE ID:	58346
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 12 of 30 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring

	sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47245, Diazinon **Region 3**

Santa Maria River Estuary

LOE ID:	58354
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47245, Diazinon **Region 3**

Santa Maria River Estuary

LOE ID:	58345
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment

Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 8 monitoring sites [Santa Maria River Estuary - Sediment site 1 - 312SMESD1, Santa Maria River Estuary - Sediment site 2 - 312SMESD2, Santa Maria River Estuary - Sediment site 3 - 312SMESD3, Santa Maria River Estuary - Sediment site 4 - 312SMESD4, Santa Maria River Estuary - Sediment site 5 - 312SMESD5, Santa Maria River Estuary - Sediment site 6 - 312SMESD6, Santa Maria River Estuary - Sediment site 7 - 312SMESD7, Santa Maria River Estuary - Sediment site 8 - 312SMESD8]
Temporal Representation:	Data was collected over the time period 5/28/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 47245, Diazinon **Region 3**

Santa Maria River Estuary

LOE ID:	58347
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 12 of 30 samples exceed the criterion for DIAZINON.

Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**42848**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Twenty-one of the 25 samples exceed the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this supports rejection of the Null Hypothesis. However, none of the 25 samples exceed the water quality objective for Non-Contact Recreation. These data are collected at the CCAMP monitoring site located less than 300 m upstream of the estuary. There are no inputs between the CCAMP monitoring site and the estuary and therefore these data are representative of the E. coli loading to the estuary.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty-one of 25 samples exceeded the Evaluation Guideline (USEPA Ambient Water Quality Criteria for Bacteria, 1986) as it applies to the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL was approved by USEPA on 04/24/2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42848, Escherichia coli (E. coli) **Region 3**

Santa Maria River Estuary

LOE ID:	27093
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 0 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2005-12/6/2006. CCAMP Coastal confluence

	monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42848, Escherichia coli (E. coli) **Region 3**

Santa Maria River Estuary

LOE ID:	27094
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	21
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 21 of 25 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2005-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42860** **Region 3**

Santa Maria River Estuary

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm

	Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle.

This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2.

Forty-four of the 61 samples exceed the water quality objective for the Water Contact Recreation beneficial use and this supports rejection of the Null Hypothesis. In addition, 5 of the 61 samples also exceed the water quality objective for Non-Contact Recreation. These data are collected at the CCAMP monitoring site located less than 300 m upstream of the estuary. There are no inputs between the CCAMP monitoring site and the estuary and therefore these data are representative of the E. coli loading to the estuary.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-four of the 61 samples exceed the water quality objective for the Water Contact Recreation beneficial use and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL was approved by USEPA on 04/24/2013.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42860, Fecal Coliform **Region 3**

Santa Maria River Estuary

LOE ID:	27095
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	61
Number of Exceedances:	5

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 5 of 61 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42860, Fecal Coliform **Region 3**

Santa Maria River Estuary

LOE ID:	27096
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	44
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Coastal Confluences (CC) data for Santa Maria River to determine beneficial use support and results are as follows: 44 of 61 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200

	MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River was collected at 1 monitoring site [312SMA-Santa Maria River above Estuary]
Temporal Representation:	Data was collected over the time period 1/4/2001-12/6/2006. CCAMP Coastal confluence monitoring is conducted monthly (with the exception of April 2003 - December 2003) and is ongoing.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52003**	**Region 3**
Santa Maria River Estuary		

Pollutant:	**Malathion**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by USEPA:	08/31/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Thirteen out of thirteen water samples exceed the evaluation guideline applied to protect for aquatic life beneficial uses. Seventeen sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of thirty samples exceed the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen out of thirteen samples exceed the evaluation guideline set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. The Santa Maria River Watershed Toxicity and Pesticides TMDL has been approved by the USEPA on August 31, 2015.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 52003, Malathion **Region 3**

Santa Maria River Estuary

LOE ID:	58222
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 13 of 13 samples exceed the criterion for MALATHION. Seventeen sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52003, Malathion **Region 3**

Santa Maria River Estuary

LOE ID:	58217
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower - 312SME_L, Santa Maria River Estuary Upper - 312SME_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/29/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52383** **Region 3**

Santa Maria River Estuary

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Nitrogen Compounds and Orthophosphate TMDL
TMDL Project Code:	1082
Date TMDL Approved by USEPA:	03/08/2016
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Seven of the

24 samples exceeded the water quality objective for dissolved oxygen in Estuarine Habitats and therefore this use is not supported. However, only 1 of the 24 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seven of the 24 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. The Santa Maria River Watershed nutrients TMDL has been approved by USEPA.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52383, Oxygen, Dissolved **Region 3**

Santa Maria River Estuary

LOE ID:	47883
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower, Santa Maria River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 10:00:00 AM-10/29/2009 10:04:41 AM.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 52383, Oxygen, Dissolved **Region 3**

Santa Maria River Estuary

LOE ID:	47881
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	24
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 7 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected at 2 monitoring sites [Santa Maria River Estuary Lower, Santa Maria River Estuary Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 10:00:00 AM-10/29/2009 10:04:41 AM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **53052** **Region 3**

Santa Maria River Estuary

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Toxicity and Pesticides TMDL
TMDL Project Code:	1081
Date TMDL Approved by	08/31/2015

USEPA:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two-four lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. One LOE summarizes sediment samples. Eleven of the twenty-four sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. One LOE summarizes water samples. Eighteen of the thirty water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. However, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Eleven of the 24 sediment samples and 18 of the 30 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. The Santa Maria River Watershed Toxicity and Pesticide TMDL has been approved by USEPA on August 31, 2015. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53052, Toxicity **Region 3**

Santa Maria River Estuary

LOE ID:	58336
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	18
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Thirty samples were collected to evaluate water toxicity. Eighteen of the thirty samples exhibited significant toxicity. All thirty samples were tested for toxic effects using Hyalella azteca and seventeen of those had statistically significant effects. Those eight sample are as follows: at station 312SME_L on 4/24/08, 9/11/08, 2/7/09, 10/15/09, 10/21/09 and 10/29/09 and at station 312SME_U on 4/28/08, 7/1/08, 8/11/08, 9/11/08, 10/9/08, 2/7/09,

	9/8/09, 9/23/09, 10/15/09, 10/21/09 and 10/29/09). Twelve of the thirty samples were also tested for toxic effects using Ceriodaphnia dubia and one of those samples (collected at 312SME_U on 1/5/08) had statistically significant effects that were not observed in the Hyalella test. Therefore nine of the samples had at least one statistically significant effect to one of the test organisms.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Lower Santa Maria River Estuary (312SME_L) and Upper Santa Maria River Estuary (312SME_U).
Temporal Representation:	The samples ere collected between January 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53052, Toxicity **Region 3**

Santa Maria River Estuary

LOE ID:	80349
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	11
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Twenty-four samples were collected during three sampling events that each included eight stations to evaluate sediment toxicity. Twelve of the 24 samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca survival and growth were observed in the following samples: at station 312SMESD1 on 10/29/09, at station 312SMESD2 on 10/29/09, at station 312SMESD5 on 10/15/08, and 10/29/09, at station 312SMESD6 on 5/28/08 and 10/15/08, at 312SMESD7 on 10/15/08 and 10/29/09 and at 312SMESD8 on 5/28/08, 10/15/08 and 10/29/09.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at eight Santa Maria River Estuary stations (312SMESD1, 312SMESD2, 312SMESD3, 312SMESD4, 312SMESD5, 312SMESD6, 312SMESD7, 312SMESD8).
Temporal Representation:	The samples were collected in May, and October 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	37228	Region 3
Santa Maria River Estuary		

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Collection System Failure | Domestic Animals/Livestock | Natural Sources | Urban Runoff/Storm Sewers
TMDL Name:	Santa Maria River Watershed Fecal Indicator Bacteria TMDL
TMDL Project Code:	917
Date TMDL Approved by USEPA:	04/24/2013
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.3 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.3 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-four of 74 samples exceeded the Shellfish Harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. The Santa Maria River Watershed Fecal Indicator Bacteria TMDL was approved by USEPA on 04/24/2013. 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 37228, Total Coliform **Region 3**

Santa Maria River Estuary

LOE ID:	20139
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	74
Number of Exceedances:	74
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Santa Maria River Estuary to determine beneficial use support and results are as follows: 74 of 74 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin Objective for total coliform in waters designated for Shellfish Harvesting states that no more than ten percent of the samples collected during any 30-day period shall exceed 230 MPN/100 mL for a five-tube decimal dilution test (Chapter 3 section II.A.2, page III-12).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Santa Maria River Estuary was collected from a single CCAMP monitoring site (312SMA- Santa Maria River above the estuary). This monitoring site is approximately 300 m upstream of the estuary. However, there are no tributaries or other inputs between this monitoring site and the estuary.
Temporal Representation:	Data was collected over the time period 1/12/00 - 12/6/06. CCAMP staff conducted monitoring monthly at this site with the exception of April 2003-December 2003.
Environmental Conditions:	
QAPP Information:	SWAMP QAPP
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Salinas River Refuge Lagoon (South)**
Water Body ID: **CAE30911010199812091258 00**
Water Body Type: **Estuary**

DECISION ID **39946** **Region 3**
Salinas River Refuge Lagoon (South)

Pollutant: **Chlorophyll-a**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Original
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

These LOEs should be moved to the Salinas River Lagoon (North) and this decision will be decommissioned in the next listing cycle. The data are not for this water segment.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One of the 2 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of the 2 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39946, Chlorophyll-a **Region 3**
Salinas River Refuge Lagoon (South)

LOE ID: 15270

Pollutant: Chlorophyll-a

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 9/24/2001-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39946, Chlorophyll-a **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15257
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 9/24/2001-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39947 Region 3

Salinas River Refuge Lagoon (South)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This decision should be decommissioned because the data summarized in the LOEs is not for this water body. The data was collected in the Salinas River Lagoon (North). Two lines of evidence are available in the administrative record to assess this pollutant. However, upon review of the data, the level of quantification is higher than the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). Therefore, this decision will not use these twelve samples because the results were non-detect and the level of quantification is higher than the evaluation guideline and the results could not be quantified with the level of certainty required by the Listing Policy. LOE#s 18655 and 18656 should be revised to show zero of zero samples exceeding the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39947, Chlorpyrifos **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	18656
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game

Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [DHS010 - Salinas Lagoon]
Temporal Representation:	Data was collected over the time period 8/29/1994-8/1/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39947, Chlorpyrifos **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	18655
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for chlorpyrifos.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [DHS010 - Salinas Lagoon]
Temporal Representation:	Data was collected over the time period 8/29/1994-8/1/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 40004 **Region 3**

Salinas River Refuge Lagoon (South)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision should be decommissioned because the data summarized in the LOEs is not for this water body. The data was collected in the Salinas River Lagoon (North). Due to mapping constraints, this decision cannot be decommissioned this assessment cycle.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40004, Diazinon **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	18735
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [DHS010 - Salinas Lagoon]
Temporal Representation:	Data was collected over the time period 8/29/1994-8/1/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40004, Diazinon **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	18736
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Department of Health Services (R3_DHS1) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for diazinon.
Data Reference:	Final Data File used for assessment: DHS Sediment Chemistry Data, File 1 (feb06) Final Data File used for assessment: DHS Sediment Chemistry Data, File 2 (sed06)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [DHS010 - Salinas Lagoon]
Temporal Representation:	Data was collected over the time period 8/29/1994-8/1/1995.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	No QAPP was provided for this data set.
QAPP Information Reference(s):	

DECISION ID 39995 **Region 3**

Salinas River Refuge Lagoon (South)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	No new data were assessed. These LOEs should be moved to the Salinas River Lagoon (North) and

Conclusion:	this decision will be decommissioned in the next listing cycle. The data are not for this water segment. Due to mapping constraints, this decision cannot be decommissioned this assessment cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Thirteen of the 89 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 89 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirteen of the 89 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1 of the 89 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39995, Oxygen, Dissolved **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15291
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	89
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 13 of 89 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 1/20/1990-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39995, Oxygen, Dissolved **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15306
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	89
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 89 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]

Temporal Representation:	Data was collected over the time period 1/20/1990-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39995, Oxygen, Dissolved **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15346
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 11/18/1996-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39995, Oxygen, Dissolved **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15345

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	13
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 13 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 11/18/1996-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39952 Region 3

Salinas River Refuge Lagoon (South)

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	These LOEs should be moved to the Salinas River Lagoon (North) and this decision will be decommissioned in the next listing cycle. The data are not for this water segment. Due to mapping constraints, this decision cannot be decommissioned this assessment cycle. The following information summarizes the data associated with this decision.

This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Twelve of the 96 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twelve of the 96 samples exceed the Evaluation Guideline (Moyle 1976) applied to protect the Cold Freshwater Habitat beneficial use and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 39952, Temperature, water **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15229
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	96
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 12 of 96 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 1/20/1990-4/29/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39996 Region 3

Salinas River Refuge Lagoon (South)

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

These LOEs should be moved to the Salinas River Lagoon (North) and this decision will be decommissioned in the next listing cycle. The data are not for this water segment. Due to mapping constraints, this decision cannot be decommissioned this assessment cycle.

The following information summarizes the data associated with this decision.

This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. In addition, A recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008) identifies Salinas River (and its lagoon) as having "Definite run or populationÂ". Therefore this Turbidity Evaluation Guideline is relevant to the waterbody.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifty of 98 samples exceeded the Evaluation Guideline (Sigler et al., 1984) applied to protect for aquatic life beneficial uses and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 39996, Turbidity **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15276
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	98
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 50 of 98 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 1/20/1990-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39996, Turbidity **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15275
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	98
Number of Exceedances:	50
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 50 of 98 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 1/20/1990-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 40008 Region 3

Salinas River Refuge Lagoon (South)

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	These LOEs should be moved to the Salinas River Lagoon (North) and this decision will be decommissioned in the next listing cycle. The data are not for this water segment. Due to mapping constraints, this decision cannot be decommissioned this assessment cycle.

The following information summarizes the data associated with this decision. This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy.

Four lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.2 the site exceeded numeric objectives for conventional pollutants. According to the binomial distribution, waters shall be placed on the section 303(d) list if the number of measured exceedances supports rejection of the null hypothesis as presented in Table 3.2.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Sixty-three of 95 samples exceed the Cold and Warm Freshwater Habitat water quality objectives and 77 of 95 samples exceed the numeric objectives for Non-Contact and Water Contact Recreation. Each of these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40008, pH **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15137
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	63
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 63 of 95 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 1/20/1990-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40008, pH **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15140
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	95
Number of Exceedances:	63
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 63 of 95 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 1/20/1990-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40008, pH **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15139
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	95
Number of Exceedances:	77
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 77 of 95 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 1/20/1990-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40008, pH **Region 3**

Salinas River Refuge Lagoon (South)

LOE ID:	15138
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	95

Number of Exceedances:	77
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 77 of 95 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 1 monitoring site [309SLRLAG - Salinas River Lagoon]
Temporal Representation:	Data was collected over the time period 1/20/1990-6/3/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Salinas River Lagoon (North)**
Water Body ID: **CAE30911010199808281432 32**
Water Body Type: **Estuary**

DECISION ID **34389** **Region 3**
Salinas River Lagoon (North)

Pollutant: **Pesticides**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: One line of evidence (LOE) is available in the administrative record to assess this pollutant but no data or information is associated with that LOE. The data cannot be found that was used in the initial assessment of this water segment-pollutant combination.

This decision for the general category of 'Pesticides' is being replaced by individual decisions for each of the pesticides for which there are data. This water segment is being assessed for a full suite of currently applied pesticides such as OP and pyrethroid pesticides. Those individual decisions replace this generic decision for pesticides.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision is not supported by data and there are data assessed for several different pesticides for this water segment.

Line of Evidence (LOE) for Decision ID 34389, Pesticides **Region 3**
Salinas River Lagoon (North)

LOE ID: 4004

Pollutant: Pesticides
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: Placeholder reference pre-2006 303(d)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified

Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 51701 Region 3

Salinas River Lagoon (North)

Pollutant:	**Alachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the thirty water samples exceed the evaluation guideline applied to protect for aquatic life beneficial uses. Zero of the thirty water samples exceed the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51701, Alachlor Region 3

Salinas River Lagoon (North)

LOE ID:	57349
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51701, Alachlor **Region 3**

Salinas River Lagoon (North)

LOE ID:	57350
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for alachlor is 76 Âµg/L.
Guideline Reference:	Water Quality Advisory for Alachlor
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51701, Alachlor **Region 3**

Salinas River Lagoon (North)

LOE ID:	57348
Pollutant:	Alachlor
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ALACHLOR.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for Alachlor is 0.002 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51716 **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Atrazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the aquatic life evaluation guideline. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty samples exceeded the evaluation guidelines and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51716, Atrazine — Region 3

Salinas River Lagoon (North)

LOE ID:	57367
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life 50% effect concentration (EC50) for Atrazine is 43 ug/L based on a 14 day toxicity study of Duckweed (Lemna gibba).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51716, Atrazine **Region 3**

Salinas River Lagoon (North)

LOE ID:	57351
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for atrazine is 0.001 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51716, Atrazine **Region 3**

Salinas River Lagoon (North)

LOE ID:	57352
Pollutant:	Atrazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ATRAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life 50% effect concentration (EC50) for Atrazine is 43 ug/L based on a 14 day toxicity study of Duckweed (Lemna gibba).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51790** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Bifenthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in

sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Five lines of evidence are available in the administrative record to assess this pollutant. One of one water samples exceeded the aquatic life evaluation guideline. Twenty-nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of thirty samples exceeded the evaluation guideline applied to protect the estuarine habitat beneficial use. Zero out of fifteen sediment samples exceeded the aquatic life evaluation guideline. For the sediment samples and for the aquatic life water samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty water samples exceeded the evaluation guideline for estuarine habitat; one out of one water samples exceeded the evaluation guideline for aquatic life habitat; zero out of fifteen sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51790, Bifenthrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57368
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 9 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 15 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51790, Bifenthrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57369
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 9 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 15 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for bifenthrin is the median lethal concentration (LC50) of 0.43 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.43 ug/g is the geometric mean of three toxicity LC50 values from Amweg et al. (2005) and one toxicity LC50 value from Amweg and Weston (2007).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5 Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51790, Bifenthrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57381
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for BIFENTHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The genus mean acute value for a mysid (Mysidopsis bahia) of 0.0034 ug/L (DFG 00-6, 2000).
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response, Administrative Report 00-6

Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51790, Bifenthrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57383
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for BIFENTHRIN. Twenty-nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51790, Bifenthrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57382
Pollutant:	Bifenthrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for BIFENTHRIN. Twenty-nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Bifenthrin does not exceed 0.0006 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51722**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Butylate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of 150 water samples exceeded the aquatic life evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of 150 water samples exceeded the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51722, Butylate **Region 3**

Salinas River Lagoon (North)

LOE ID:	57384
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	150
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 150 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP

	Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51722, Butylate **Region 3**

Salinas River Lagoon (North)

LOE ID:	57396
Pollutant:	Butylate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	150
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 150 samples exceed the criterion for BUTYLATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Butylate, 3,800ug/L, is the geometric mean of the result of two 96 hr LC50 toxicity studies of Oncorhynchus mykiss (Rainbow trout). (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51794** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Carbaryl**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One out of thirty water samples exceeded the aquatic life evaluation guideline. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One out of thirty water samples exceeded the evaluation guideline for aquatic life and zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51794, Carbaryl **Region 3**

Salinas River Lagoon (North)

LOE ID:	57399
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals

Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51794, Carbaryl **Region 3**

Salinas River Lagoon (North)

LOE ID:	57397
Pollutant:	Carbaryl
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for carbaryl is 40 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51794, Carbaryl **Region 3**

Salinas River Lagoon (North)

LOE ID:	57398
Pollutant:	Carbaryl

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 30 samples exceed the criterion for CARBARYL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbaryl is 0.02 Âµg/L.
Guideline Reference:	Compilation of Water Quality Goals
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51796**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Carbofuran**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the aquatic life evaluation guideline. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty water samples exceeded the evaluation guideline for aquatic life and zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51796, Carbofuran **Region 3**

Salinas River Lagoon (North)

LOE ID:	57400
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for carbofuran is 18 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51796, Carbofuran **Region 3**

Salinas River Lagoon (North)

LOE ID:	57412
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51796, Carbofuran **Region 3**

Salinas River Lagoon (North)

LOE ID:	57413
Pollutant:	Carbofuran
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CARBOFURAN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for carbofuran is 0.5 Âµg/L.
Guideline Reference:	Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51803**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Chlorothalonil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality

standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51803, Chlorothalonil **Region 3**

Salinas River Lagoon (North)

LOE ID:	57414
Pollutant:	Chlorothalonil
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Chlorothalonil.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the 2006 USEPA Drinking Water Standards and Health Advisories, the Ten-day Health Advisory for Chlorothalonil is 200 ug/L.
Guideline Reference:	2006 edition of the drinking water standards and health advisories. EPA 822-R-03-013
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **51815** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Cyfluthrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for

pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of twenty-one sediment samples exceeded the evaluation guideline applied to protect the aquatic life beneficial use.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of twenty-one sediment samples exceeded the evaluation guideline applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51815, Cyfluthrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57447
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 3 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 21 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and

	Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51815, Cyfluthrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57446
Pollutant:	Cyfluthrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 3 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 21 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cyfluthrin is the median lethal concentration (LC50) of 1.1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.1 ug/g is the geometric mean of LC50 values for cyfluthrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5

Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**51816**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Cyhalothrin, Lambda**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero water samples exceeded the aquatic life evaluation guideline. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero of fourteen sediment samples exceeded the aquatic life evaluation guideline. A total of 24 samples were collected, however 10 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No water or sediment samples exceeded the evaluation guidelines applied to protect the aquatic life beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51816, Cyhalothrin, Lambda **Region 3**

Salinas River Lagoon (North)

LOE ID:	57462
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 10 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 14 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51816, Cyhalothrin, Lambda **Region 3**

Salinas River Lagoon (North)

LOE ID:	57461
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 10 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 14 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for lambda-cyhalothrin is the median lethal concentration (LC50) of 0.44 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.44 ug/g is the geometric mean of LC50 values for lambda-cyhalothrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51816, Cyhalothrin, Lambda **Region 3**

Salinas River Lagoon (North)

LOE ID:	57463
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyhalothrin, lambda, total. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51816, Cyhalothrin, Lambda **Region 3**

Salinas River Lagoon (North)

LOE ID:	57476
Pollutant:	Cyhalothrin, Lambda
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Cyhalothrin, lambda, total. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cyhalothrin, lambda, total does not exceed 0.0005 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51821**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Cypermethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero water samples exceeded the aquatic life evaluation guideline. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of thirty water samples exceeded the evaluation guideline applied to protect the estuarine habitat beneficial use. Zero out of ten sediment samples exceeded the aquatic life evaluation guideline. A total of 24 samples were collected, however 14 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Estuarine habitat beneficial use excluded, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

For the Estuarine beneficial use, after review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

For the aquatic life beneficial uses, after review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51821, Cypermethrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57477
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 14 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 10 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon -

	Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51821, Cypermethrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57478
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	10
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 14 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 10 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for cypermethrin is the median lethal concentration (LC50) of 0.3 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.3 ug/g is the geometric mean of LC50 values for cypermethrin from Maund et al. (2002).
Guideline Reference:	Partitioning, bioavailability, and toxicity of the pyrethroid insecticide cypermethrin in sediments. Environmental Toxicology and Chemistry 21:9-15
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51821, Cypermethrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57494
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CYPERMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The genus mean acute value for a grass shrimp (Palaemonetes pugio) of 0.016 ug/L (DFG 00-6, 2000).
Guideline Reference:	Hazard Assessment of the Synthetic Pyrethroid Insecticides Bifenthrin, Cypermethrin, Esfenvalerate, and Permethrin to Aquatic Organisms in the Sacramento-San Joaquin River System. California Department of Fish and Game. Office of Spill Prevention and Response. Administrative Report 00-6
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51821, Cypermethrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57495
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for CYPERMETHRIN. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51821, Cypermethrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57496
Pollutant:	Cypermethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for CYPERMETHRIN. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Cypermethrin; Cypermethrin, total does not exceed 0.0002 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**53529**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**DDD (Dichlorodiphenyldichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the water samples are counted in this assessment because the laboratory data reporting limit(s) are above the objective and therefore the results reported as a 'non-detect' could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Zero of the 24 sediment samples exceed the evaluation guideline for aquatic life uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the water samples and zero of the 24 sediment samples exceed the evaluation guideline for aquatic life uses and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 53529, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57513
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDD(p,p). Thirty sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD criteria for the protection of human health from consumption of organisms only is 0.00084 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53529, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57515
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53529, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57497
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDD(p,p). Thirty sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDD(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00083 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53529, DDD (Dichlorodiphenyldichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57514
Pollutant:	DDD (Dichlorodiphenyldichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDD.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDD is 28.0 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3,

	Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 51824 Region 3

Salinas River Lagoon (North)

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Nine lines of evidence are available in the administrative record to assess this pollutant. Zero of the 24 sediment samples exceed the evaluation guidelines for Cold and Warm Freshwater Habitats. Zero of the 30 water samples exceed the evaluation guideline for estuarine habitats. Zero of the samples could be compared to the evaluation guidelines for Municipal and Domestic Supply or Cold and Warm Freshwater Habitats because the laboratory reporting limit is higher than the guideline and the result was reported as 'non-detected'. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 24 sediment samples exceed the evaluation guidelines for Cold and Warm Freshwater Habitats. Zero of the 30 water samples exceed the evaluation guideline for estuarine habitats. These do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51824, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57565

Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51824, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57625
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine

	beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51824, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57550
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDT.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in

	bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDT is 62.9 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51824, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57624
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDT, Total.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for total DDTs is 572 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3,

	Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51824, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57549
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Thirty sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51824, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57548
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51824, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57547
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in freshwater is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51824, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57532
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DDT(p,p).
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criterion continuous concentration (expressed as a 4-day average) to protect aquatic life in saline water is 0.001 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51824, DDT (Dichlorodiphenyltrichloroethane) Region 3

Salinas River Lagoon (North)

LOE ID:	57533
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for DDT(p,p). Thirty sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDT criteria for the protection of human health from consumption of organisms only is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51833 Region 3

Salinas River Lagoon (North)

Pollutant:	**Deltamethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of twenty sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. Four of the sediment samples will not be used in this decision because the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51833, Deltamethrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57566
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51833, Deltamethrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57321
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 4 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 20 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA.

	Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51833, Deltamethrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57320
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 4 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 20 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the median lethal concentration (LC50) of 0.79 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 0.79 ug/g is the geometric mean of LC50 values for deltamethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River

	Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51833, Deltamethrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57567
Pollutant:	Deltamethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DELTAMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for deltamethrin is the maximum acceptable toxicant concentration (MATC) of 0.02 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 0.03 ug/L and the no observed effect concentration (NOEC) of 0.017 ug/L as determined in a 280 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 47227 **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Two of the thirty samples exceed the evaluation guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Zero of the thirty samples exceed the USEPA drinking water health advisory. Zero of twenty-four sediment sample exceeded the aquatic life evaluation guideline (Ding et al. 2011). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of thirty water samples exceeded the evaluation guideline (Finlayson, 2004) and zero out of twenty-four sediment samples exceeded the evaluation guideline (Ding et al. 2011) and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 47227, Diazinon **Region 3**

Salinas River Lagoon (North)

LOE ID:	57353
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for diazinon is 1 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47227, Diazinon **Region 3**

Salinas River Lagoon (North)

LOE ID:	57337
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the

	data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47227, Diazinon **Region 3**

Salinas River Lagoon (North)

LOE ID:	57335
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 47227, Diazinon **Region 3**

Salinas River Lagoon (North)

LOE ID:	57336
Pollutant:	Diazinon

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47227, Diazinon **Region 3**

Salinas River Lagoon (North)

LOE ID:	57338
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 2 of 30 samples exceed the criterion for DIAZINON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47227, Diazinon **Region 3**

Salinas River Lagoon (North)

LOE ID:	57322
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Diazinon.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for diazinon is the median lethal concentration (LC50) of 11 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 11 ug/g is the geometric mean of LC50 values for diazinon from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring

	sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 51866 Region 3

Salinas River Lagoon (North)

Pollutant:	**Disulfoton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline applied to protect for the municipal beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51866, Disulfoton Region 3

Salinas River Lagoon (North)

LOE ID:	57354
Pollutant:	Disulfoton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for DISULFOTON.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for disulfoton is 0.7 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51883**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Esfenvalerate/Fenvalerate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of twenty-three sediment samples exceeded the aquatic life evaluation guideline. One sediment sample was not used in this decision because one of the non-detect sample results was compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51883, Esfenvalerate/Fenvalerate **Region 3**

Salinas River Lagoon (North)

LOE ID:	57355
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51883, Esfenvalerate/Fenvalerate — Region 3

Salinas River Lagoon (North)

LOE ID:	57356
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ESFENVALERATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.13 ug/L, as determined in a 96 hour toxicity test using the fathead minnow, Pimephales promelas (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51883, Esfenvalerate/Fenvalerate — Region 3

Salinas River Lagoon (North)

LOE ID:	57370
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 23 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51883, Esfenvalerate/Fenvalerate **Region 3**

Salinas River Lagoon (North)

LOE ID:	57371
Pollutant:	Esfenvalerate/Fenvalerate
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 23 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for esfenvalerate/fenvalerate is the median lethal concentration (LC50) of 1.5 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1.5 ug/g is the geometric mean of LC50 values for esfenvalerate/fenvalerate from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**51884**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Ethalfluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51884, Ethalfluralin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57698
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 1.4 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L as determined in a 50 day toxicity study with the Bluegill sunfish, Lepomis macrochirus. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51884, Ethalfluralin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57372
Pollutant:	Ethalfluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for ETHALFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethalfluralin is the maximum acceptable toxicant concentration (MATC) of 0.7 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 1.4 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L as determined in a 50 day toxicity study with the Bluegill sunfish, Lepomis macrochirus. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51899**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Fenpropathrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in

sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of twenty-four sediment samples exceeded the aquatic life evaluation guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51899, Fenpropathrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57699
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine beneficial use support and results are as follows: A total of 24 samples were collected and the results were all non-detect.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1

	ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51899, Fenpropathrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57702
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51899, Fenpropathrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57701
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for FENPROPATHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Fenpropathrin is the median lethal concentration (LC50; 2.2 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51899, Fenpropathrin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57700
Pollutant:	Fenpropathrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Santa Maria River Estuary to determine

	beneficial use support and results are as follows: A total of 24 samples were collected and were all non-detect.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fenpropathrin is the median lethal concentration (LC50) of 1 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 1 ug/g is the geometric mean of LC50 values for fenpropathrin from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**51962**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Fipronil**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of four sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of four sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51962, Fipronil **Region 3**

Salinas River Lagoon (North)

LOE ID:	57704
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 20 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 4 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring

	sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51962, Fipronil **Region 3**

Salinas River Lagoon (North)

LOE ID:	57703
Pollutant:	Fipronil
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 20 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 4 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil is the median lethal concentration (LC50) of 0.13 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 51966 Region 3

Salinas River Lagoon (North)

Pollutant:	**Fipronil Sulfide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. One out of five sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. A total of 24 samples were collected, however 19 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One out of five sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51966, Fipronil Sulfide Region 3

Salinas River Lagoon (North)

LOE ID:	57706
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 19 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. One of the remaining 5 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51966, Fipronil Sulfide **Region 3**

Salinas River Lagoon (North)

LOE ID:	57705
Pollutant:	Fipronil Sulfide
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 19 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. One of the remaining 5 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfide is the median lethal concentration (LC50) of 0.16 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	**51975**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Fipronil Sulfone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of nine sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses. A total of 24 samples were collected, however 15 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable

beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of nine sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51975, Fipronil Sulfone **Region 3**

Salinas River Lagoon (North)

LOE ID:	57707
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 15 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 9 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of

	0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 51975, Fipronil Sulfone **Region 3**

Salinas River Lagoon (North)

LOE ID:	57708
Pollutant:	Fipronil Sulfone
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 15 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 9 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for fipronil sulfone is the median lethal concentration (LC50) of 0.12 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Maul et al. 2008).
Guideline Reference:	Effect of sediment-associated pyrethroids, fipronil, and metabolites on Chironomus tentans growth rate, body mass, condition index, immobilization, and survival. Environ. Toxicol. Chem. 27(12):2582-2590.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring

	sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 51985 Region 3

Salinas River Lagoon (North)

Pollutant:	**Hexazinone**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51985, Hexazinone Region 3

Salinas River Lagoon (North)

LOE ID:	57709
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L based on a 120 hour toxicity study of green algae (selenastrum capricornutum).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51985, Hexazinone **Region 3**

Salinas River Lagoon (North)

LOE ID:	57710
Pollutant:	Hexazinone
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for HEXAZINONE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Hexazinone is 6.8 ug/L based on a 120 hour toxicity study of green algae (selenastrum capricornutum).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 51988 Region 3

Salinas River Lagoon (North)

Pollutant:	**Iprodione**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51988, Iprodione Region 3

Salinas River Lagoon (North)

LOE ID:	57711

Pollutant:	Iprodione
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Iprodione.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Iprodione is 280 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water with 0.04 mg/kg/day as the reference dose. An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Summary for Iprodione
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**51999**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero water samples exceeded the evaluation guideline for the aquatic life beneficial use. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of thirty water samples exceeded the evaluation guideline for the municipal

beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 51999, Malathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57714
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for MALATHION. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring

	sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51999, Malathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57713
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for MALATHION. Thirty sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 51999, Malathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57712

Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MALATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for malathion is 500 Âµg/L.
Guideline Reference:	2011 Edition of the Drinking Water Standards and Health Advisories
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52019**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Methidathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52019, Methidathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57717
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP

	Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52019, Methidathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57716
Pollutant:	Methidathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Methidathion is the maximum acceptable toxicant concentration (MATC) of 0.86 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 1.13 ug/L and the no observed effect concentration (NOEC) of 0.66 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52019, Methidathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57715
Pollutant:	Methidathion

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for METHIDATHION.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for methidathion is 0.7 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52048**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Five lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Zero out of twenty-four sediment samples exceeded the evaluation guideline for the aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No water or sediment samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52048, Methyl Parathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57718
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phorate is 1.8 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52048, Methyl Parathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57720
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52048, Methyl Parathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57719
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52048, Methyl Parathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57721
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).
Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 52048, Methyl Parathion **Region 3**

Salinas River Lagoon (North)

LOE ID:	57722
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Methyl parathion.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for methyl parathion is the median lethal concentration (LC50) of 6 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 6 ug/g is the geometric mean of LC50 values for methyl parathion from Ding et al. (2011).

Guideline Reference:	Toxicity of Sediment-Associated Pesticides to Chironomus dilutus and Hyalella azteca. Arch. Environ. Contam. Toxicol. 61:83Â–92.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 52063 Region 3

Salinas River Lagoon (North)

Pollutant:	**Molinate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52063, Molinate Region 3

Salinas River Lagoon (North)

LOE ID:	57724
Pollutant:	Molinate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52063, Molinate **Region 3**

Salinas River Lagoon (North)

LOE ID:	57723
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for molinate is 20 ug/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52063, Molinate **Region 3**

Salinas River Lagoon (North)

LOE ID:	57725
Pollutant:	Molinate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for MOLINATE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Molinate is the maximum acceptable toxicant concentration (MATC) of 600 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is the geometric mean of the lowest observed effect concentration (LOEC) of 900 ug/L and the no observed effect concentration (NOEC) of 380 ug/L as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]

Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52065 Region 3

Salinas River Lagoon (North)

Pollutant:	**Napropamide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52065, Napropamide Region 3

Salinas River Lagoon (North)

LOE ID:	57726
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52065, Napropamide **Region 3**

Salinas River Lagoon (North)

LOE ID:	57727
Pollutant:	Napropamide
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for NAPROPAMIDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Napropamide is the median lethal concentration (LC50; 12000 ug/L) based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52382 Region 3

Salinas River Lagoon (North)

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Three water quality objectives are assessed. Two of the 27 samples exceeded the water quality objectives for dissolved oxygen in Estuarine and Cold Freshwater Habitats, and 0 of the 27 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 27 samples exceeded the water quality objectives for dissolved oxygen in Estuarine and Cold Freshwater Habitats, and 0 of the 27 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52382, Oxygen, Dissolved Region 3

Salinas River Lagoon (North)

LOE ID:	47849
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Estuarine Habitat
Number of Samples:	27
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 2 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower, Salinas River Lagoon - Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 2:13:02 PM-10/28/2009 2:03:09 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 52382, Oxygen, Dissolved **Region 3**

Salinas River Lagoon (North)

LOE ID:	47848
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 2 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower, Salinas River Lagoon - Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 2:13:02 PM-10/28/2009 2:03:09 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 52382, Oxygen, Dissolved **Region 3**

Salinas River Lagoon (North)

LOE ID:	47851
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower, Salinas River Lagoon - Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 2:13:02 PM-10/28/2009 2:03:09 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **52101** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Pentachlorobenzene (PCNB)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52101, Pentachlorobenzene (PCNB) **Region 3**

Salinas River Lagoon (North)

LOE ID:	57728
Pollutant:	Pentachlorobenzene (PCNB)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PCNB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Health Services archived Advisory Level for Pentachloronitrobenzene is 20 ug/L.
Guideline Reference:	IRIS Database Calculations (summary)

Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52147 Region 3

Salinas River Lagoon (North)

Pollutant:	**Permethrin, total**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Four lines of evidence are available in the administrative record to assess this pollutant. The single water sample exceeded the evaluation guideline for the aquatic life beneficial uses. Zero out of twenty-four sediment samples exceeded the aquatic life evaluation guideline. For the water samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No sediment samples exceeded the evaluation guideline and the single water sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52147, Permethrin, total Region 3

Salinas River Lagoon (North)

LOE ID:	57731
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PERMETHRIN. Twenty-nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52147, Permethrin, total **Region 3**

Salinas River Lagoon (North)

LOE ID:	57732
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PERMETHRIN. Twenty-nine sample results were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of permethrin does not exceed 0.002 ug/L and if the 1-h average concentration does not exceed 0.01 ug/L. For this assessment, the 4-day average concentration was used. Mixtures of permethrin and other pyrethroids should be considered in an additive manner. (Fojut et al. 2012)
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: II. Pyrethroid insecticides. Reviews of Environmental Contamination and Toxicology 216:51-103.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52147, Permethrin, total **Region 3**

Salinas River Lagoon (North)

LOE ID:	57729
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).
Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 52147, Permethrin, total **Region 3**

Salinas River Lagoon (North)

LOE ID:	57730
Pollutant:	Permethrin, total
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for Permethrin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for permethrin is the median lethal concentration (LC50) of 8.9 ug/g and is normalized by the percentage of organic carbon in the sediment sample. The LC50 8.9 ug/g is the geometric mean of LC50 values for permethrin from Amweg et al. (2005).

Guideline Reference:	Use and Toxicity of Pyrethroid Pesticides in the Central Valley, California, USA. Environmental Toxicology and Chemistry, 24:966-972, with erratum 24:No. 5
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID 52162 Region 3

Salinas River Lagoon (North)

Pollutant:	**Phosmet**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52162, Phosmet Region 3

Salinas River Lagoon (North)

LOE ID:	57733
Pollutant:	Phosmet

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52162, Phosmet **Region 3**

Salinas River Lagoon (North)

LOE ID:	57734
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Phosmet is 5.6 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52162, Phosmet **Region 3**

Salinas River Lagoon (North)

LOE ID:	57735
Pollutant:	Phosmet
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PHOSMET.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for phosmet is 140 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the

	data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52281 Region 3

Salinas River Lagoon (North)

Pollutant:	**Prometryn**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52281, Prometryn Region 3

Salinas River Lagoon (North)

LOE ID:	57603
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine

	beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for prometryn is 28 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52281, Prometryn **Region 3**

Salinas River Lagoon (North)

LOE ID:	57602
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52281, Prometryn **Region 3**

Salinas River Lagoon (North)

LOE ID:	57736
Pollutant:	Prometryn
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROMETRYN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	According to the USEPA Office of Pesticide Programs Ecotoxicity database, the aquatic life EC50 for Prometryn is 1 ug/L.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52290** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Propanil (DCPA mono- and di-acid degrad)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52290, Propanil (DCPA mono- and di-acid degrad) **Region 3**

Salinas River Lagoon (North)

LOE ID:	57604
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.6 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L, as determined in a 60 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52290, Propanil (DCPA mono- and di-acid degrad) Region 3

Salinas River Lagoon (North)

LOE ID:	57605
Pollutant:	Propanil (DCPA mono- and di-acid degrad)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for PROPANIL.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propanil is the maximum acceptable toxicant concentration (MATC) of 0.5 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 0.6 ug/L and the no observed effect concentration (NOEC) of 0.4 ug/L, as determined in a 60 day toxicity study with the fathead minnow, Pimephales promelas. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper -

	309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52297 Region 3

Salinas River Lagoon (North)

Pollutant:	**Propiconazole**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52297, Propiconazole Region 3

Salinas River Lagoon (North)

LOE ID:	57608
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L) based on a 96 toxicity study of Rainbow trout (Oncorhynchus mykiss).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52297, Propiconazole **Region 3**

Salinas River Lagoon (North)

LOE ID:	57609
Pollutant:	Propiconazole
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Propiconazole.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Propiconazole is the median lethal concentration (LC50; 830 ug/L) based on a 96 toxicity study of Rainbow trout (Oncorhynchus mykiss).

Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 52302 Region 3

Salinas River Lagoon (North)

Pollutant:	**Resmethrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52302, Resmethrin Region 3

Salinas River Lagoon (North)

LOE ID:	57610
Pollutant:	Resmethrin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for RESMETHRIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Resmethrin is 210 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52304**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Simazine**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52304, Simazine **Region 3**

Salinas River Lagoon (North)

LOE ID:	57612
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52304, Simazine **Region 3**

Salinas River Lagoon (North)

LOE ID:	57611
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for simazine is 0.004 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals, CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52304, Simazine **Region 3**

Salinas River Lagoon (North)

LOE ID:	57616
Pollutant:	Simazine
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for SIMAZINE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA national ambient water quality criteria for freshwater aquatic life instantaneous maximum for simazine is 10 Âµg/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52309**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Thiobencarb/Bolero**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52309, Thiobencarb/Bolero — Region 3

Salinas River Lagoon (North)

LOE ID:	57619
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.0 ug/L and the no observed effect concentration (NOEC) of 1.0 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52309, Thiobencarb/Bolero — Region 3

Salinas River Lagoon (North)

LOE ID:	57618
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Thiobencarb is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.0 ug/L and the no observed effect concentration (NOEC) of 1.0 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52309, Thiobencarb/Bolero **Region 3**

Salinas River Lagoon (North)

LOE ID:	57617
Pollutant:	Thiobencarb/Bolero
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for THIOBENCARB.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Maximum Contaminant Level for thiobencarb is 0.07 mg/L (Title 22 of the California Code of Regulations).
Objective/Criterion Reference:	Maximum Contaminant Levels for organic and inorganic chemicals. CCR
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **52313** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Trifluralin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the aquatic life beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52313, Trifluralin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57632
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.18 ug/L and the no observed effect concentration (NOEC) of 1.14 ug/L as determined in a 48 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 52313, Trifluralin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57633
Pollutant:	Trifluralin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for TRIFLURALIN.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Trifluralin is the maximum acceptable toxicant concentration (MATC) of 1.58 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.18 ug/L and the no observed effect concentration (NOEC) of 1.14 ug/L as determined in a 48 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID	**52317**	**Region 3**
Salinas River Lagoon (North)		

Pollutant:	**Vinclozolin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero out of thirty water samples exceeded the evaluation guideline for the municipal beneficial use. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of thirty water samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 52317, Vinclozolin **Region 3**

Salinas River Lagoon (North)

LOE ID:	57634
Pollutant:	Vinclozolin
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for Vinclozolin.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Based on USEPA IRIS reference dose (RfD) as a drinking water level, the drinking water health advisory level for Vinclozolin is 180 Âµg/L. This was calculated assuming 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water.Â An additional uncertainty factor of 10 is used for Class C carcinogens.
Guideline Reference:	IRIS Database Calculations (summary)
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID **53530** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**DDE (Dichlorodiphenyldichloroethylene)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) List under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 of the Listing Policy, a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Three lines of evidence are available in the administrative record to assess this pollutant. All six of the water samples exceed the evaluation guideline for aquatic life uses. Zero of the 24 sediment samples the evaluation guideline for aquatic life uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. All six of the water samples exceed the evaluation guideline for aquatic life uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53530, DDE (Dichlorodiphenyldichloroethylene) Region 3

Salinas River Lagoon (North)

LOE ID:	57516
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	6
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for DDE(p,p). Twenty-four sample result(s) were not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan.

	2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The DDE(p,p) criteria for the protection of human health from the consumption of water and organisms is 0.00059 ug/L (California Toxics Rule, 2000).
Objective/Criterion Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 53530, DDE (Dichlorodiphenyldichloroethylene) Region 3

Salinas River Lagoon (North)

LOE ID:	57531
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring

	sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 53530, DDE (Dichlorodiphenyldichloroethylene) Region 3

Salinas River Lagoon (North)

LOE ID:	57530
Pollutant:	DDE (Dichlorodiphenyldichloroethylene)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 24 samples exceed the criterion for DDE.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	In freshwater sediments the probable effect concentration (predictive of sediment toxicity) for sum of DDE is 31.3 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Environmental Contamination and Toxicology. 39: 20-31
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

DECISION ID	53531	Region 3
Salinas River Lagoon (North)		

Pollutant:	**Temperature, water**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Five of the 30 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Five of the 30 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53531, Temperature, water	**Region 3**
Salinas River Lagoon (North)	

LOE ID:	47868
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for Water Temperature.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower, Salinas River Lagoon - Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 2:13:02 PM-10/28/2009 2:03:09 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **53191** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**pH**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Twenty of the 29 samples exceed the water quality objective Cold and Warm Freshwater Habitats, and 21 of the 29 samples exceed the water quality objectives for Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty of the 29 samples exceed the water quality objective Cold and Warm Freshwater Habitats, and 21 of the 29 samples exceed the water quality objectives for Recreation. These exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53191, pH **Region 3**

Salinas River Lagoon (North)

LOE ID:	47866
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	29
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 21 of 29 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower, Salinas River Lagoon - Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 2:13:02 PM-10/28/2009 2:03:09 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53191, pH **Region 3**

Salinas River Lagoon (North)

LOE ID:	47867
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 20 of 29 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower, Salinas River Lagoon - Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 2:13:02 PM-10/28/2009 2:03:09 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53191, pH **Region 3**

Salinas River Lagoon (North)

LOE ID:	47864
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 20 of 29 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower, Salinas River Lagoon - Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 2:13:02 PM-10/28/2009 2:03:09 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

Line of Evidence (LOE) for Decision ID 53191, pH **Region 3**

Salinas River Lagoon (North)

LOE ID:	47865

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	29
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 21 of 29 samples exceed the criterion for pH.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower, Salinas River Lagoon - Upper]
Temporal Representation:	Data was collected over the time period 1/5/2008 2:13:02 PM-10/28/2009 2:03:09 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	A QAPP was not specifically written for this project. However, staff conducting data collection and laboratory analysis are also SWAMP contractors. All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in
QAPP Information Reference(s):	2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA

DECISION ID **47956** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list. Six lines of evidence are available in the administrative record to assess this pollutant. Five of thirty water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) applied to protect for aquatic life beneficial

uses. Zero of the thirty samples exceed the USEPA drinking water health advisory. Zero of twenty-three sediment samples exceeded the aquatic life evaluation guideline (Amweg and Weston, 2007).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it in the Being Addressed portion of the 303(d) list. In accordance with section 2.2 of the Policy there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Five of thirty water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 47956, Chlorpyrifos **Region 3**

Salinas River Lagoon (North)

LOE ID:	57415
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 23 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters

	shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 47956, Chlorpyrifos **Region 3**

Salinas River Lagoon (North)

LOE ID:	57430
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: A total of 24 samples were collected, however 1 of the non-detect sample results were compared to the evaluation guideline and the OC Normalized method detection limit result was above the guideline and therefore could not be quantified with the level of certainty required by the Listing Policy. Zero of the remaining 23 quantifiable sample results were exceeding the evaluation guideline.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for chlorpyrifos is the median lethal concentration (LC50) of 1.77 ug/g and is normalized by the percentage of organic carbon in the sediment sample (Amweg and Weston, 2007).
Guideline Reference:	Whole-sediment toxicity identification evaluation tools for pyrethroid insecticides: I. piperonyl butoxide addition. Environ. Toxicol. Chem. 26:2389-2396.
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 8 monitoring sites [Salinas River Lagoon - Sediment site 1 - 309SALSD1, Salinas River Lagoon - Sediment site 2 - 309SALSD2, Salinas River Lagoon - Sediment site 3 - 309SALSD3, Salinas River Lagoon - Sediment site 4 - 309SALSD4, Salinas River Lagoon - Sediment site 5 - 309SALSD5, Salinas River Lagoon - Sediment site 6 - 309SALSD6, Salinas River Lagoon - Sediment site 7 - 309SALSD7, Salinas River Lagoon - Sediment site 8 - 309SALSD8]
Temporal Representation:	Data was collected over the time period 5/29/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.
QAPP Information Reference(s):	Quality Assurance Project Plan from UC Davis Marine Pollution Studies Laboratory.

Line of Evidence (LOE) for Decision ID 47956, Chlorpyrifos **Region 3**

Salinas River Lagoon (North)

LOE ID:	57445
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	30
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 0 of 30 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA drinking water health advisory for chlorpyrifos is 2 Âµg/L.
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.

QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47956, Chlorpyrifos **Region 3**

Salinas River Lagoon (North)

LOE ID:	57431
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47956, Chlorpyrifos **Region 3**

Salinas River Lagoon (North)

LOE ID:	57432
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Line of Evidence (LOE) for Decision ID 47956, Chlorpyrifos **Region 3**

Salinas River Lagoon (North)

LOE ID:	57433
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	30
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed USGS data for Salinas River Lagoon (North) to determine beneficial use support and results are as follows: 5 of 30 samples exceed the criterion for CHLORPYRIFOS.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life (Central Coast Basin Plan General Objective).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The saltwater criterion continuous concentration to protect aquatic organisms is 0.009 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Salinas River Lagoon (North) was collected at 2 monitoring sites [Salinas River Lagoon - Lower - 309SAL_L, Salinas River Lagoon - Upper - 309SAL_U]
Temporal Representation:	Data was collected over the time period 1/5/2008-10/28/2009.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

DECISION ID 33922 Region 3

Salinas River Lagoon (North)

Pollutant:	**Nutrients**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. Decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed. The decision has been revised to reflect the inclusion of this pollutant/water segment in an USEPA approved TMDL titled Lower Salinas River Watershed Nutrient TMDL.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has changed to reflect the adoption of the TMDL.

Line of Evidence (LOE) for Decision ID 33922, Nutrients Region 3

Salinas River Lagoon (North)

LOE ID:	4003
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID **53533** **Region 3**

Salinas River Lagoon (North)

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location.

One LOE summarizes sediment samples. Five of the twenty-four sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

One LOEs summarize water samples. Four of the thirty water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of adding this water segment-pollutant combination from the CWA section 303(d) List. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five of the 24 sediment samples and 4 of the 30 water samples resulted in a significant toxic effect to one or more test organisms and therefore exceed the water quality objective for aquatic life protection. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53533, Toxicity **Region 3**

Salinas River Lagoon (North)

LOE ID:	57627
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	30
Number of Exceedances:	4
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Thirty samples were collected to evaluate water toxicity. Four of the thirty samples exhibited significant toxicity. All thirty samples were tested for toxic effects using Hyalella azteca. One sample (2/17/09) was also tested using Ceriodaphnia dubia. Statistically significant effects were observed in the following samples: at 309SAL_L on 2/25/08 and on 9/9/09 and at 309SAL_U on 2/25/2008 and 2/17/09. The sample from 309SAL_U also had toxic effects to Ceriodaphnia dubia on 2/17/2009.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at two sites in the Salinas River Lagoon - Lower and Salinas River Lagoon (309SAL_L) and Upper Salinas River Lagoon (309SAL_U).
Temporal Representation:	The samples were collected between January 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 53533, Toxicity **Region 3**

Salinas River Lagoon (North)

LOE ID:	57626
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	A total of twenty-four samples were collected from each of eight different stations on three sample dates to evaluate sediment toxicity. Five of the 24 samples exhibited significant toxicity. The toxicity tests included survival and growth of Hyalella azteca. Statistically significant effects on Hyalella azteca were observed in the following samples: at 309SALSD2 on 10/30/08, at 309SALSD6 on 5/29/08 and 10/28/09, at 309SALSD7 on 5/29/08, and at 309SLASD8 on 10/28/09.
Data Reference:	Data for various pollutants in the Pajaro, Salinas, and Santa Maria River estuaries, Jan. 2008-Oct. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Toxicity was defined as a statistically significant effect in the sample exposure compared to the control using EPA-recommended hypothesis testing. The t-test is used to determine if there is a statistically significant decrease in organism response in the sample as compared to the control. In the SWAMP data format, a Significance Effect Code of SL denotes toxic test results.
Guideline Reference:	
Spatial Representation:	The samples were collected at Salinas River Lagoon stations 309SALSD1, 309SALSD2, 309SALSD3, 309SALSD4, 309SALSD5, 309SALSD6, 309SALSD7, 309SALSD8.
Temporal Representation:	The samples were collected between January 2008 and October 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the Watershed-scale Evaluation of Agricultural BMP Effectiveness Protecting Critical Coastal Habitats project. A QAPP was provided and the data was analyzed at the Marine Pollution Studies Laboratory and submitted in SWAMP format.
QAPP Information Reference(s):	Surface Water Ambient Monitoring Program Quality Assurance Program Plan

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Moro Cojo Slough**
Water Body ID: **CAE30600015199812091322 46**
Water Body Type: **Estuary**

DECISION ID **42244** **Region 3**
Moro Cojo Slough

Pollutant: **Escherichia coli (E. coli)**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

The sample size for the evaluation guideline for E. coli non-contact recreation is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 4.2. Therefore, the use support rating is set to 'insufficient information'.

Five lines of evidence are available in the administrative record to assess this pollutant. Nine of 26 samples exceed the evaluation guideline (USEPA Ambient Water Quality Criteria for Bacteria -1986) set to protect for water contact recreation (i.e. swimming, wading etc.) and 0 of 24 samples exceed the water quality objective for non-contact recreation.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Nine of 26 samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 42244, Escherichia coli (E. coli) **Region 3**
Moro Cojo Slough

LOE ID: 17598

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 6 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data, 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 6 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 309-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42244, Escherichia coli (E. coli) **Region 3**

Moro Cojo Slough

LOE ID:	11205
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42244, Escherichia coli (E. coli) **Region 3**

Moro Cojo Slough

LOE ID:	11204
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff

	monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42244, Escherichia coli (E. coli) **Region 3**

Moro Cojo Slough

LOE ID:	17599
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 6 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 309-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42244, Escherichia coli (E. coli) **Region 3**

Moro Cojo Slough

LOE ID:	50665
Pollutant:	Escherichia coli (E. coli)

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41902**	**Region 3**
Moro Cojo Slough		

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.3 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Thirty three of 53 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty three of 53 samples exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41902, Total Coliform **Region 3**

Moro Cojo Slough

LOE ID:	50679
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41902, Total Coliform **Region 3**

Moro Cojo Slough

LOE ID:	9182
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	39
Number of Exceedances:	21
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 21 of 39 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41902, Total Coliform **Region 3**

Moro Cojo Slough

LOE ID:	17439
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	12
Number of Exceedances:	12

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 12 of 12 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 6 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 309-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper, 309-MOROC-33 - Moro Coho Slough Lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	41008	Region 3
Moro Cojo Slough		

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-eight lines of evidence are available in the administrative record to assess this pollutant. Four beneficial uses are assessed. A total of 213 of the 460 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 270 of the 460 samples exceed the water quality objectives for Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 213 of the 460 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats, and 270 of the 460 samples exceed the water quality objectives for Recreation. Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	13761
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 7 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	48740
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 15 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	48751
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	36
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 26 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	48752
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	36
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 26 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	13760
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	25
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 11 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	13711
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	25
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 11 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	13710
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 7 of 25 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	15194
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	353
Number of Exceedances:	175
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 175 of 353 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and

	were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	15178
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	353
Number of Exceedances:	175
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 175 of 353 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	10143
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	10142
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	11206
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]

Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	11220
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	48753
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 15 of 36 samples exceed the criterion for pH.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	15193
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	353
Number of Exceedances:	207
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 207 of 353 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water

	Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	15192
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	353
Number of Exceedances:	207
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 207 of 353 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [

	306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	18931
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 6 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 309-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper, 309-MOROC-33 - Moro Coho Slough Lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	18930

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 6 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 309-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper, 309-MOROC-33 - Moro Coho Slough Lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	18913
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	11
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 10 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 6 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 309-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper, 309-MOROC-33 - Moro Coho Slough Lower]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	18912
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	7
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 7 of 11 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 6 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 309-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper, 309-MOROC-33 - Moro Coho Slough Lower]

Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	50668
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	50666
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2

Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	50697
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	52903
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 9 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	52954
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	21
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 9 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	52946
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	21
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 12 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	52939
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	21
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 12 of 21 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41008, pH **Region 3**

Moro Cojo Slough

LOE ID:	50650

Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**33107**	**Region 3**
Moro Cojo Slough		

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	The pollutant name was changed from Â‘Unionized AmmoniaÂ’ to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.1 of the Listing Policy. Under section 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status. Eight lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Ten of the 58 samples exceed the water quality objective for unionized ammonia set to protect aquatic life.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.
In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Ten of the 58 samples exceed the water quality objective for unionized ammonia set to protect aquatic life and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 33107, Ammonia **Region 3**

Moro Cojo Slough

LOE ID:	50644
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33107, Ammonia **Region 3**

Moro Cojo Slough

LOE ID:	50681
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 33107, Ammonia **Region 3**

Moro Cojo Slough

LOE ID:	48663
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 5 of 20 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 33107, Ammonia **Region 3**

Moro Cojo Slough

LOE ID:	9388
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1].
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33107, Ammonia **Region 3**

Moro Cojo Slough

LOE ID:	9183
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 2 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1].
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33107, Ammonia **Region 3**

Moro Cojo Slough

LOE ID:	13743
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33107, Ammonia **Region 3**

Moro Cojo Slough

LOE ID:	13728
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33107, Ammonia **Region 3**

Moro Cojo Slough

LOE ID:	48662
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	20
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 5 of 20 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	32590	Region 3
Moro Cojo Slough		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal on the CWA section 303(d) List under sections 2.2 and 4.2 of the Listing Policy. Under 4.2 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Thirty-six lines of evidence (LOEs) are available in the administrative record to assess this pollutant. Nineteen LOEs summarize dissolved oxygen data in which 156 of the 458 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 87 of the 458 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and in Estuarine Habitats. Note that the dissolved oxygen water quality objective for Warm and Estuarine Habitats is the same. Only 59 of the samples are summarized in LOEs for the Estuarine Habitat use, and this is because only the most recent data are included in those LOEs. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Freshwater Habitats and also Estuarine Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 156 of the 458 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 87 of the 458 samples exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats and in Estuarine Habitats. Each of these exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. The Lower Salinas River Watershed Nutrient TMDL has been approved by USEPA on October 13, 2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13707
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 15 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13708
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 22 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13709

Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	22
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 22 of 25 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13746
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	21
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results

	are as follows: 21 of 25 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13021
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 15 of 35 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13022
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 8 of 35 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13023
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 20 of 35 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13024
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	35
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 20 of 35 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13002
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2

	Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13003
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 6 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]

Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13004
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	13005
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	15066
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	190
Number of Exceedances:	83
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 83 of 190 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006

	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	15079
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	190
Number of Exceedances:	83
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 83 of 190 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	18000
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 6 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 309-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	17999
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 11 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 6 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 309-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	48721
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	36
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to

	determine beneficial use support and results are as follows: 25 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	15326
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	322
Number of Exceedances:	87
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 87 of 322 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation: Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID: 15327

Pollutant: Oxygen, Dissolved
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Dissolved

Beneficial Use: Warm Freshwater Habitat
Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 322
Number of Exceedances: 43

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 43 of 322 samples exceed the criterion for Oxygen, Dissolved.
Data Reference: Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006
Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006
Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation: Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information: QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	48720
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 25 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	48739
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 26 of 36 samples exceed the

	criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	48738
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	36
Number of Exceedances:	26
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 26 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006).

	All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	48736
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 15 of 36 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	48737
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	26

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 26 of 36 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	50653
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	50649
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	50648
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	50696
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]

Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	50695
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	52884
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Estuarine Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	52878
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	52874
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	52870
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	50663
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.

Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	52909
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National

QAPP Information Reference(s):	Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 32590, Oxygen, Dissolved **Region 3**

Moro Cojo Slough

LOE ID:	52852
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

DECISION ID **41098** **Region 3**

Moro Cojo Slough

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Fourteen lines of evidence are available in the administrative record to assess this pollutant. Twenty-six of the 234 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Twenty-six of the 234 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	9181
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 8 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural

	Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 3/29/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	48678
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 2 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	48664
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 2 of 36 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	13745
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	13744
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 24 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	15208
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	75
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 6 of 75 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	15207
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	75
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 6 of 75 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	9180

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 8 of 38 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 3/29/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	52823
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 4 of 38 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	52816
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	4

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 4 of 38 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	52931
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	52924
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	50682
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.

Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41098, Chlorophyll-a **Region 3**

Moro Cojo Slough

LOE ID:	50645
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.

Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42124** **Region 3**

Moro Cojo Slough

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of five water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of five water samples exceeded the aquatic life evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) and none of the water sample exceeded the municipal and domestic supply objective. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42124, Chlorpyrifos **Region 3**

Moro Cojo Slough

LOE ID:	55374
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The saltwater criterion continuous concentration to protect aquatic organisms is 0.009 ug/L (Siepmann and Finlayson 2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42124, Chlorpyrifos **Region 3**

Moro Cojo Slough

LOE ID:	15336
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42124, Chlorpyrifos **Region 3**

Moro Cojo Slough

LOE ID:	48679
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42124, Chlorpyrifos **Region 3**

Moro Cojo Slough

LOE ID:	48680
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater criterion continuous concentration to protect aquatic organisms is 0.015 ug/L (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game (with minor corrections to significant figures as described in Beaulaurier et al., 2005).
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42124, Chlorpyrifos **Region 3**

Moro Cojo Slough

LOE ID:	15337
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **48521** **Region 3**

Moro Cojo Slough

Pollutant:	**Demeton**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (National Recommended Water Quality Criteria, 2009). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48521, Demeton **Region 3**

Moro Cojo Slough

LOE ID:	55376
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No

	individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48521, Demeton **Region 3**

Moro Cojo Slough

LOE ID:	55377
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48521, Demeton **Region 3**

Moro Cojo Slough

LOE ID:	55378
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Demeton.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA National Recomm. WQ criteria, 4-day avg. is 0.1 ug/L.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48521, Demeton **Region 3**

Moro Cojo Slough

LOE ID:	55375
Pollutant:	Demeton
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Demeton.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The Demeton criterion continuous concentration for the protection of freshwater aquatic life is 0.1 ug/L (National Recommended Water Quality Criteria, 2009).
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	42125	Region 3
Moro Cojo Slough		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of five water samples exceeded the Evaluation Guideline (Finlayson, 2004) applied to protect for aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of five water samples exceeded the evaluation guideline. The sample sizes are insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 16 samples is needed for application of table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42125, Diazinon **Region 3**

Moro Cojo Slough

LOE ID:	48699
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42125, Diazinon **Region 3**

Moro Cojo Slough

LOE ID:	15072
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42125, Diazinon **Region 3**

Moro Cojo Slough

LOE ID:	48681
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to

	determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 42125, Diazinon **Region 3**

Moro Cojo Slough

LOE ID:	15071
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department

	of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42125, Diazinon **Region 3**

Moro Cojo Slough

LOE ID:	48698
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Diazinon.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The freshwater chronic value for diazinon is 0.1 ug/L, expressed as a continuous concentration (Finlayson, 2004).
Guideline Reference:	Water quality for diazinon. Memorandum to J. Karkoski, Central Valley RWQCB. Rancho Cordova, CA: Pesticide Investigation Unit, CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	48524	Region 3
Moro Cojo Slough		

Pollutant:	**Dichlorvos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined by USEPA, USEPA Office of Pesticide Programs). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48524, Dichlorvos	**Region 3**
Moro Cojo Slough	

LOE ID:	55388
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48524, Dichlorvos **Region 3**

Moro Cojo Slough

LOE ID:	55397
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface

	Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48524, Dichlorvos **Region 3**

Moro Cojo Slough

LOE ID:	55396
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dichlorvos.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2

	ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48524, Dichlorvos **Region 3**

Moro Cojo Slough

LOE ID:	55389
Pollutant:	Dichlorvos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dichlorvos.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for ddvp (dichlorvos) is the maximum acceptable toxicant concentration (MATC) of 7.2 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 10.1 ug/L and the no observed effect concentration (NOEC) of 5.2 ug/L as determined in a 61 day toxicity study with rainbow trout, Oncorhynchus mykiss. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48525** **Region 3**

Moro Cojo Slough

Pollutant:	**Dimethoate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs Ecotoxicity Database). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48525, Dimethoate **Region 3**

Moro Cojo Slough

LOE ID:	55403
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48525, Dimethoate **Region 3**

Moro Cojo Slough

LOE ID:	55404
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48525, Dimethoate **Region 3**

Moro Cojo Slough

LOE ID:	55405
Pollutant:	Dimethoate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Dimethoate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50; 43 ug/L). This is based on the lowest LC50 value in the Office of Pesticide Programs Ecotoxicity database (stonefly 96 hr test).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48525, Dimethoate **Region 3**

Moro Cojo Slough

LOE ID:	55398
Pollutant:	Dimethoate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Dimethoate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Dimethoate is the median lethal concentration (LC50) of 43 ug/L, as determined in a 96 hour toxicity test with the stonefly, Pteronarcys californica (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48526**	**Region 3**
Moro Cojo Slough		

Pollutant:	**Ethoprop**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (maximum acceptable toxicant concentration (MATC) or Chronic Value as defined by USEPA, Office of Pesticide Programs). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48526, Ethoprop **Region 3**

Moro Cojo Slough

LOE ID:	55418
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database.

	Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48526, Ethoprop **Region 3**

Moro Cojo Slough

LOE ID:	55414
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ethoprop.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and

	sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48526, Ethoprop **Region 3**

Moro Cojo Slough

LOE ID:	55413
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48526, Ethoprop **Region 3**

Moro Cojo Slough

LOE ID:	55412
Pollutant:	Ethoprop
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Ethoprop.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Ethoprop is the maximum acceptable toxicant concentration (MATC) of 1.4 ug/L. The MATC (or Chronic Value as defined in USEPA 1985, P20 section F) is calculated as the geometric mean of the lowest observed effect concentration (LOEC) of 2.4 ug/L and the no observed effect concentration (NOEC) of 0.80 ug/L, as determined in a 21 day toxicity study with the water flea, Daphnia magna. Threshold values (LOEC and NOEC) are from USEPA Office of Pesticide Programs Ecotoxicity database.
Guideline Reference:	OPP Pesticide Ecotoxicity Database. Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**41145**	**Region 3**
Moro Cojo Slough		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Four of 29 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 29 samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 29 samples exceed the evaluation guideline for contact recreation (i.e. swimming) and 0 of 29 samples exceed the water quality objective for non-contact recreation. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41145, Fecal Coliform **Region 3**

Moro Cojo Slough

LOE ID:	50667
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41145, Fecal Coliform **Region 3**

Moro Cojo Slough

LOE ID:	50664
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41145, Fecal Coliform **Region 3**

Moro Cojo Slough

LOE ID:	11203
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	27
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo

	Slough to determine beneficial use support and results are as follows: 0 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41145, Fecal Coliform **Region 3**

Moro Cojo Slough

LOE ID:	11202
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	27
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 4 of 27 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum

	of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 4/26/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**48527**	**Region 3**
Moro Cojo Slough		

Pollutant:	**Malathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (Palumbo, A.J., et al., 2012). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48527, Malathion — Region 3

Moro Cojo Slough

LOE ID:	55425
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48527, Malathion — Region 3

Moro Cojo Slough

LOE ID:	55420
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48527, Malathion **Region 3**

Moro Cojo Slough

LOE ID:	55419
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Malathion.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.

Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48527, Malathion **Region 3**

Moro Cojo Slough

LOE ID:	55421
Pollutant:	Malathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Malathion.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	UC Davis Aquatic Life Criteria: Aquatic life should not be affected unacceptably if the 4-day average concentration of Malathion does not exceed 0.028 ug/L.
Guideline Reference:	Aquatic life water quality criteria derived via the UC Davis method: I. Organophosphate insecticides. Reviews of Environmental Contamination and Toxicology 216:1-48.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **48529** **Region 3**

Moro Cojo Slough

Pollutant:	**Methyl Parathion**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (Menconi, M. and J.M. Harrington, 1992). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48529, Methyl Parathion **Region 3**

Moro Cojo Slough

LOE ID:	55434
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48529, Methyl Parathion **Region 3**

Moro Cojo Slough

LOE ID:	55428
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Parathion, methyl.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Organisms in the Sacramento River System. California Department of Fish and Game. Environmental

	Services Division. Administrative Report 92-1
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48529, Methyl Parathion **Region 3**

Moro Cojo Slough

LOE ID:	55427
Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48529, Methyl Parathion **Region 3**

Moro Cojo Slough

LOE ID:	55426

Pollutant:	Methyl Parathion
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Parathion, methyl.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The California Department of Fish and Game (now called the California Department of Fish and Wildlife) instantaneous criteria for Methyl Parathion is 0.08 ug/L.
Guideline Reference:	Hazard Assessment of the Insecticide Methyl to Aquatic Organisms in the Sacramento River System
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**48530**	**Region 3**
Moro Cojo Slough		

Pollutant:	**Phorate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the five samples exceed the evaluation guideline for aquatic life uses (USEPA Office of Pesticide Programs Ecotoxicity Database). This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information' unless the beneficial use is not supported.

	Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the five samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 48530, Phorate **Region 3**

Moro Cojo Slough

LOE ID:	55458
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48530, Phorate **Region 3**

Moro Cojo Slough

LOE ID:	55459
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48530, Phorate **Region 3**

Moro Cojo Slough

LOE ID:	55460
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	State Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Phorate.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50; 2 ug/L). This is based on a 96 hour toxicity study of Bluegill sunfish (Lepomis macrochirus)
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]
Temporal Representation:	Data was collected over the time period 2/14/2007-9/25/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 48530, Phorate **Region 3**

Moro Cojo Slough

LOE ID:	55457
Pollutant:	Phorate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed CMP data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Phorate.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (CCRWQCB 2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. (Chapter III, Section II.A.2 Objectives for all Inland and Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The evaluation guideline for Phorate is the median lethal concentration (LC50) of 2 ug/L, as determined in a 96 hour toxicity study of bluegill sunfish (Lepomis macrochirus) (USEPA Office of Pesticide Programs Ecotoxicity database).
Guideline Reference:	OPP Pesticide Ecotoxicity Database.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [Moro Cojo Slough - 306MOR]

Temporal Representation:	Data was collected over the time period 8/23/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID 44627 Region 3

Moro Cojo Slough

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Seventy-one of the 516 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Seventy-one of the 516 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 44627, Temperature, water Region 3

Moro Cojo Slough

LOE ID:	52977
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	2

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 2 of 21 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 44627, Temperature, water **Region 3**

Moro Cojo Slough

LOE ID:	50652
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).

Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 44627, Temperature, water **Region 3**

Moro Cojo Slough

LOE ID:	13006
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44627, Temperature, water — Region 3

Moro Cojo Slough

LOE ID:	13038
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	36
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 5 of 36 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 2 monitoring sites [306MCM-Moro Cojo Slough at Moss Landing Harbor, 306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44627, Temperature, water — Region 3

Moro Cojo Slough

LOE ID:	14632
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44627, Temperature, water **Region 3**

Moro Cojo Slough

LOE ID:	15244
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	378
Number of Exceedances:	56
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 56 of 378 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field

	Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44627, Temperature, water **Region 3**

Moro Cojo Slough

LOE ID:	18653
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 9 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 4 monitoring sites [306-MOROC-31 - Moro Coho Slough Upper, 306-MOROC-32 - Moro Coho Slough at Castroville Slough Confluence, 306-MOROC-33 - Moro Coho Slough Lower, 309-MOROC-31 - Moro Coho Slough Upper]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44627, Temperature, water **Region 3**

Moro Cojo Slough

LOE ID:	48756
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 4 of 39 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID **41491** **Region 3**

Moro Cojo Slough

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eighteen lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Three LOEs summarize sediment samples. Two sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity) and three additional sediment samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, five total samples are available to assess toxic effects in sediment samples. Two of the five sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Fifteen LOEs summarize water samples. Seven water samples are summarized in LOEs using each of the test organisms as the pollutant name (i.e. plant toxicity, invertebrate toxicity or vertebrate toxicity) and eleven additional water samples are summarized in LOEs using the pollutant name Â‘toxicityÂ’. Therefore, eighteen total samples are available to assess toxic effects in water samples. Five of the eighteen water samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 5 sediment samples and 5 of the 18 water samples exceed the water quality objective for aquatic life protection.and these exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41491, Toxicity — Region 3

Moro Cojo Slough

LOE ID:	23906
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23897
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23893
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Cyprinodon variegatus

	Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23894
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Cyprinodon variegatus Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data

	Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23904
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23898
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of

	appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23886
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Ampelisca abdita Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 7/26/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23885
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 5 samples exceed the criterion for Toxicity, Ampelisca abdita Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 7/26/2005-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23903
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Selenastrum capricornutum Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected on a single day 2/16/2005. Cooperative Monitoring Program (CMP) staff

	conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23902
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 9 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected on a single day 3/21/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23900
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 4/12/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23899
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 10 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 4/12/2005-5/25/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23890
Pollutant:	Vertebrate Toxicity

LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Atherinops affinis Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/16/2005-3/21/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23901
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxicity, Hyalella azteca Survival (%) 9 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected on a single day 3/21/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23889
Pollutant:	Vertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Toxicity, Atherinops affinis Survival (%) 7 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/16/2005-3/21/2005. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	23905
Pollutant:	Plant Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPnorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Toxicity, Thalassiosira Growth (Cell Density) 4 days. Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the

	survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction in cell count of test organism relative to the control (alpha < 0.05) and cell count <80% of control.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 2/22/2006-9/27/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	55466
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Three samples were collected to evaluate sediment toxicity. The toxicity tests included growth and survival of Hyalella azteca and survival of Eohaustorius estuarius. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. One of the three samples (4/16/09) exhibited significant toxicity to Hyalella azteca growth and survival. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 306MOR-Moro Cojo Slough at Highway 1.
Temporal Representation:	The samples were collected annualy between April 2007 and April 2009.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 41491, Toxicity **Region 3**

Moro Cojo Slough

LOE ID:	55465
Pollutant:	Toxicity
LOE Subgroup:	Toxicity
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	11
Number of Exceedances:	5
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Eleven samples were collected to evaluate water toxicity. Five of the eleven samples exhibited significant toxicity. The toxicity tests for the samples included several alternative test organisms which are used when the salinity of the sample water is above the tolerance of the typical test organism. Sample water from Moro Cojo Slough was tested using the following test organisms: Ceriodaphnia dubia, Hyalella azteca, Ampelisca abdita, Cyprinodon variegatus, and total cell count (growth) of Thalassiosira pseudonana. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day at the same location. The five samples with significant toxicity included Ampelisca abdita survival in the sample from 10/23/07, Hyalella azteca survival in the sample from 1/27/09 and Thalassiosira cell count (growth) in the samples from 2/22/08, 9/30/09 and 1/20/10. It should be noted that the samples collected in 2005 and 2006, in the data file associated with this LOE, are not included in this LOE because they were included in the previous assessment cycle.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Significant effect is defined here using a two-tier approach consistent with the method used by the SWAMP program. The effect must be significant when compared to the control

	sample based on statistical test alpha level of 0.05 (Probability field in data set) AND the mean must be more than 20 percent different from the control (PercentControl field in data set).
Guideline Reference:	
Spatial Representation:	The samples were collected at 306MOR-Moro Cojo Slough at Highway 1.
Temporal Representation:	The samples were collected from October 2007 to March 2010.
Environmental Conditions:	
QAPP Information:	The data was collected for the CCRWQCB Cooperative Monitoring Program for Agriculture data and provided in SWAMP format. QAPP for the Cooperative Monitoring program for Agriculture in Region 3.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

DECISION ID	**40966**	**Region 3**
Moro Cojo Slough		

Pollutant:	**Turbidity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Twelve lines of evidence are available in the administrative record to assess this pollutant. One hundred and thirty six of the 470 samples exceed the evaluation guideline for Cold Freshwater Habitat (Sigler et al. 1984) and 131 of the 470 samples exceed the Warm Freshwater Habitat evaluation guideline (Shoup, D.E. and Wahl D.H., 2009), both used to interpret the water quality objective for turbidity. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred and thirty six of the 470 samples exceed the evaluation guideline for Cold Freshwater Habitat and 131 of the 470 samples exceed the Warm Freshwater Habitat evaluation guideline. Each of these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 40966, Turbidity	**Region 3**
Moro Cojo Slough	

LOE ID:	52962

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 4 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	50651
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	50698
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	52969
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	21
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 3 of 21 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	48754
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	38
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 14 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	15295
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	374
Number of Exceedances:	103
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 103 of 374 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	13762
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 11 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver

	monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	13039
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	48755

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	38
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 10 of 38 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-6/30/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	13763
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	23
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCWQP Northern Area Ag-Waiver Monitoring (R3_CMPNorth) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 11 of 23 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Central Coast Water Quality Preservation Inc toxicity data Final Data File used for assessment: Central Coast Water Quality Preservation Inc water

	quality data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/26/2005-12/12/2006. Cooperative Monitoring Program (CMP) staff conduct monitoring for conventional pollutants at all Ag Waiver monitoring sites monthly. CMP staff also conduct water toxicity monitoring quarterly and sediment toxicity monitoring annually (in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	13040
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 4 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150

Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40966, Turbidity **Region 3**

Moro Cojo Slough

LOE ID:	15296
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	374
Number of Exceedances:	103
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moro Cojo Slough to determine beneficial use support and results are as follows: 103 of 374 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLS - Moss Landing Road, South, 306MOREH1 - Moro Cojo Slough, 306MORCAS - Moro Cojo Slough 2]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.

QAPP Information Reference(s):

DECISION ID	52522	Region 3
Moro Cojo Slough		

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Agriculture | Domestic Animals/Livestock | Natural Sources
TMDL Name:	Salinas River Nutrients
TMDL Project Code:	87
Date TMDL Approved by USEPA:	10/13/2015
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Twelve lines of evidence are available in the administrative record to assess this pollutant. Forty-four of the 110 nitrate samples an 17 of the 70 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment.

1) This water body segment is on the 303(d) List for low dissolved oxygen. Dissolved oxygen for this water body ranged from ranged from 0.49 mg/L to 12.75 mg/L, frequently exceeding (falling below) the Cold Freshwater Habitat water quality objective of 7.0 mg/L and the Warm Freshwater Habitat water quality objective of 5.0 mg/L.
2) Floating algal mats ranged up to 80% cover, at times exceeding the screening threshold of 50% (R3 NNE Technical Report, 2010).
3) Water column chlorophyll a concentration averaged 6.59 and peaked at 90.71 ug/L, at times exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty-four of the 110 nitrate samples an 17 of the 70 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. There is evidence in support of the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment.
4. The Lower Salinas Watershed Nutrient TMDL has been approved by USEPA on 10/13/2015.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	48719
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	48718
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	39
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 2 of 39 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/30/2007-3/31/2010.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	48717
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	48700
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Region 3 Conditional Waiver Cooperative Monitoring Program, Jan. 2007-Jun. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based

	on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 10/28/2008-12/9/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the Cooperative Monitoring Program QAPP, (Clark and Ogle 2006). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Project Plan for Monitoring for the Region 3 Conditional Ag Waiver Cooperative Monitoring Program, Revision 6

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	52843
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	96
Number of Exceedances:	43
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 43 of 96 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South , 306MOREH1 - Moro Cojo Slough East of Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	52845
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 15 of 29 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]

Temporal Representation:	Data was collected over the time period 3/5/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	52833
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	96
Number of Exceedances:	43
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 43 of 96 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South , 306MOREH1 - Moro Cojo Slough East of Highway 1]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S

QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	50647
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	50646
Pollutant:	Nitrate

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	50694
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	52879
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	29
Number of Exceedances:	15
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 15 of 29 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses

	(Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 3 monitoring sites [306MOREH1 - Moro Cojo Slough East of Highway 1 , 306MORMLN - Moro Cojo Slough at Moss Landing Road, North , 306MORMLS - Moro Cojo Slough at Moss Landing Road, South]
Temporal Representation:	Data was collected over the time period 3/5/2007-2/3/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 52522, Nitrate **Region 3**

Moro Cojo Slough

LOE ID:	50683
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Moro Cojo Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The

	model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moro Cojo Slough was collected at 1 monitoring site [306MOR-Moro Cojo Slough at Highway 1]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 44588 **Region 3**

Moro Cojo Slough

Pollutant:	**Pesticides**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed. No new data are assessed. This decision has not changed from the 2010 listing cycle.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 44588, Pesticides **Region 3**

Moro Cojo Slough

LOE ID:	3966
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 36380 Region 3

Moro Cojo Slough

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 36380, Sedimentation/Siltation Region 3

Moro Cojo Slough

LOE ID:	3967
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Old Salinas River Estuary**
Water Body ID: **CAE3060001419981214143807**
Water Body Type: **Estuary**

DECISION ID **32916** **Region 3**
Old Salinas River Estuary

Pollutant: **Fecal Coliform**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Flaws in original listing
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.3 (Bacteria) of the Listing Policy.

Staff recommends removing the fecal coliform listing for this segment because the data summarized in LOE # 490 is assigned to the wrong water segment. Staff has recently segmented this water segment into two segments 1) Old Salinas River, delineated between the Salinas River mouth and Potrero Road and 2) Old Salinas River Estuary, delineated between Potrero Road that Moss Landing Harbor at Sandholdt Road. The data summarized in LOE # 490 is now being assessed for the Old Salinas River segment, in LOE #10703. This data supports the listing of the Old Salinas River segment for Fecal Coliform.

In addition, there are flaws in this original data assessment and three field duplicate measurements were included in this assessment. This has been corrected in LOE #10703.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used is for the wrong water segment (LOE # 490 for Old Salinas River Estuary) and has been re-assessed for the correct segment (LOE# 10703 for Old Salinas River)
2. The data used contains three field duplicate values, which have been corrected in the new assessment for the upstream segment (Old Salinas River) in LOE #10703.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this LOE is assigned to the wrong water segment (Old Salinas River Estuary) and has been re-assessed (in LOE #10703) for the correct segment (Old Salinas River).

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32916, Fecal Coliform **Region 3**

Old Salinas River Estuary

LOE ID:	490
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	There were nineteen samples with 6 samples exceeding the water quality objective (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Basin Plan: Fecal coliform concentration, based on minimum of not less than five samples or any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than ten percent of the total samples during any 30-day period exceed 400/100 ml.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There were 2 sampling stations.
Temporal Representation:	Monthly sampling events. Samples taken from 4/99 to 2/00.
Environmental Conditions:	
QAPP Information:	Central Coast Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID **34104** **Region 3**

Old Salinas River Estuary

Pollutant:	**Ammonia**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Flaws in original listing
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name was changed to Â‘AmmoniaÂ’ in the 2014 assessment cycle. This decision replaces the pollutant unionized ammonia. This decision contains all of the LOEs from the previous decision. This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. There are two reasons to delist this segment. First, staff has recently segmented this water segment into two segments: 1) Old Salinas River, delineated between the Salinas River mouth and Potrero Road and 2) Old Salinas River Estuary, delineated between Potrero Road that Moss Landing Harbor at Sandholdt Road. The data summarized in LOE # 491 is now being assessed for the Old Salinas River segment, in LOE #9581. Second, the calculated unionized ammonia has multiple errors, and three of

the exceedances should be removed from the sample count. The unionized ammonia assessment for the Old Salinas River includes the recalculated results from this monitoring location (see LOE # 9581).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used is not applicable to this water segment (Old Salinas River Estuary) and has been re-assessed for the correct water segment (Old Salinas River).
2. The data used in the original assessment for the Old Salinas River Estuary had several incorrect calculated unionized ammonia values, including 3 incorrect exceedances.
3. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) List because data used is for the wrong water segment (LOE # 491 for Old Salinas River Estuary) and has been re-assessed for the correct segment (LOE#9581 for Old Salinas River).

Line of Evidence (LOE) for Decision ID 34104, Ammonia **Region 3**

Old Salinas River Estuary

LOE ID:	491
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Estuarine Habitat
Number of Samples:	48
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Six out of 48 samples exceeded the general water quality objective (SWAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/L (as N) in receiving waters (Region 3 Basin Plan, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a. General Objectives, page III-4).
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from two sites. Exceedances were detected in water samples collected from one (site ID #309OLD) of the two sites.
Temporal Representation:	Samples were collected from March 1999 to March 2003.
Environmental Conditions:	The water body is located in the Salinas hydrologic unit. The sites are located at Old Salinas River at Monterey Dunes Way (309OLD) and Old Salinas River at Potrero Road (309POT).
QAPP Information:	SWAMP QAPP.
QAPP Information Reference(s):	

DECISION ID	32847	Region 3
Old Salinas River Estuary		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Flaws in original listing
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for removal from the section 303(d) list under section 4.2 (Conventional and Other Pollutants) of the Listing Policy. Staff recommends delisting Old Salinas River Estuary for Low Dissolved Oxygen because the data summarized in LOE # 489 is assigned to the wrong water segment. Staff has recently segmented this water segment into two segments 1) Old Salinas River, delineated between the Salinas River mouth and Potrero Road and 2) Old Salinas River Estuary, delineated between Potrero Road that Moss Landing Harbor at Sandholdt Road. The data summarized in LOE # 489 is now being assessed for the Old Salinas River segment, in LOE #12800. This data supports the listing of the Old Salinas River segment for Low Dissolved Oxygen. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used is for the wrong water segment (LOE # 489 for Old Salinas River Estuary) and has been re-assessed for the correct segment (LOE# 12800 for Old Salinas River) 2. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32847, Oxygen, Dissolved	Region 3
Old Salinas River Estuary	

LOE ID:	489
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	28
Number of Exceedances:	11
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Twenty-eight samples with 11 samples exceeding the water quality objectives (CCAMP, 2004).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	COLD: Dissolved oxygen concentration shall not be reduced below 7.0 mg/L at any time. WARM: Dissolved oxygen concentration shall not be reduced below 5.0 mg/L at any time.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	There were two sampling sites.
Temporal Representation:	Monthly sampling. Samples taken from 3/1/99 to 3/7/00 over 14 sampling dates.
Environmental Conditions:	
QAPP Information:	CCAMP.
QAPP Information Reference(s):	

DECISION ID 34530 Region 3

Old Salinas River Estuary

Pollutant:	**Nutrients**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34530, Nutrients Region 3

Old Salinas River Estuary

LOE ID:	3974
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 34569 Region 3

Old Salinas River Estuary

Pollutant:	**Pesticides**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed this cycle. The decision has not changed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34569, Pesticides Region 3

Old Salinas River Estuary

LOE ID:	3975
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified

Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Elkhorn Slough**
Water Body ID: **CAE30600014199812090731 37**
Water Body Type: **Estuary**

DECISION ID	39231	Region 3
Elkhorn Slough		

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Thirty lines of evidence are available in the administrative record to assess this pollutant. Three water quality objectives are assessed. Six hundred forty-four of the 1,645 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen, 282 of the 1645 samples exceeded the Warm Freshwater Habitat water quality objective for dissolved oxygen and 13 of 49 samples (only the most recent data are compared to this water quality objective) exceed the marine habitat water quality objectives for dissolved oxygen. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. Furthermore, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for Cold and Warm Freshwater Habitats as well as marine and estuarine habitats. Therefore, the use support rating for this pollutant is set at insufficient information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six hundred forty-four of the 1,645 samples exceeded the Cold Freshwater Habitat water quality objective for dissolved oxygen and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved	Region 3
Elkhorn Slough	

LOE ID:	52859
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 13 of 47 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	52864
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	47
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions

	data for Elkhorn Slough to determine beneficial use support and results are as follows: 18 of 47 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	50071
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [

	306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	50070
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	50056
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	50055
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	50111
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	50110

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	52849
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 18 of 47 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality

	conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	52898
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 8 of 47 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]

Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	52875
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 18 of 47 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	52882

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	47
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 13 of 47 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12089
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn

	Slough to determine beneficial use support and results are as follows: 13 of 24 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	18058
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12984
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	15343
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	977
Number of Exceedances:	392
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 392 of 977 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	15290
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1554
Number of Exceedances:	271
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 271 of 1554 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	15289
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	1554
Number of Exceedances:	614
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use

	support and results are as follows: 614 of 1554 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a states the following: Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of limits listed in Table 3-6 (page III-12). Table 3-6 states that the Marine Habitat Objective for dissolved oxygen states that the concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	15288
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1554
Number of Exceedances:	614
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 614 of 1554 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water

	Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	15344
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	977
Number of Exceedances:	392
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 392 of 977 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12074
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	13
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 13 of 24 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12950
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12949
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat

Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Elkhorn Slough to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a states the following: Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of limits listed in Table 3-6 (page III-12). Table 3-6 states that the Marine Habitat Objective for dissolved oxygen states that the concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12948
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Elkhorn Slough to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III,

	Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12969
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	24
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 11 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a states the following: Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of limits listed in Table 3-6 (page III-12). Table 3-6 states that the Marine Habitat Objective for dissolved oxygen states that the concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12968
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	11
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 11 of 24 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	18059
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 4 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a states the following: Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of limits listed in Table 3-6 (page III-12). Table 3-6 states that the Marine Habitat Objective for dissolved oxygen states that the concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	18060
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12966
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Elkhorn Slough to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39231, Oxygen, Dissolved **Region 3**

Elkhorn Slough

LOE ID:	12965
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Elkhorn Slough to determine beneficial use support and results are as follows: 2 of 3 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39469** **Region 3**

Elkhorn Slough

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown

Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. This decision replaces Decision #5989, for the pollutant name "Pathogens". Four lines of evidence are available in the administrative record to assess this pollutant. Thirty-two of the 92 samples exceed the water quality objective for shellfish harvesting. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-two of the 92 samples exceed the water quality objective and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 39469, Total Coliform **Region 3**

Elkhorn Slough

LOE ID:	9385
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	31
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 15 of 31 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 6/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39469, Total Coliform **Region 3**

Elkhorn Slough

LOE ID:	17441
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	14
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 14 of 15 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39469, Total Coliform — Region 3

Elkhorn Slough

LOE ID:	14009
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	44
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Elkhorn Slough to determine beneficial use support and results are as follows: 3 of 44 samples exceed the criterion for Coliform, Total.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 2 monitoring sites [308ELK_CCL - Elkhorn Slough at N. Kirkby Park, 306ELJ_CCL - Elkhorn Slough at N. Jetty]
Temporal Representation:	Data was collected over the time period 1/22/2002-12/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39469, Total Coliform — Region 3

Elkhorn Slough

LOE ID:	50087
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the

	criterion for Coliform, Total.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin Shellfish Harvesting objective (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries (page III-12)) states the following: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 MPN/100mL, not shall more than ten percent of the samples collected during any 30-day period exceed 230 MPN/100mL for a five tube decimal dilution test.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**38685**	**Region 3**
Elkhorn Slough		

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Twenty-five lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. A total of 496 of the 1,771 samples exceed the water quality objective for Cold and Warm Freshwater Habitats and for marine habitat. A total of 608 of the 1,771 samples exceeded the water quality objectives for Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. A total of 496 of the 1,771 samples exceed the water quality objective for Cold and Warm Freshwater Habitats and for marine habitat. A total of 608 of the 1,771 samples exceeded the water quality objectives for Recreation. Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.

4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	52900
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 20 of 47 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	50057
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	50112
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	

Guideline Reference:

Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	50086
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	52943
Pollutant:	pH

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	47
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 25 of 47 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	52936
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	47
Number of Exceedances:	25
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 25 of 47 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	50084
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as

	appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	52951
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 20 of 47 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	78874
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Marine Habitat
Number of Samples:	47
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 20 of 47 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	78875
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for pH.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).

Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	15136
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1695
Number of Exceedances:	475
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 475 of 1695 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.

Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	19057
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a states the following for Marine Habitat beneficial uses: The pH value shall not be depressed below 7.0 or raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	19041
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	19060
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section

	II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	19059
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH — Region 3

Elkhorn Slough

LOE ID:	19058
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 3 of 15 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH — Region 3

Elkhorn Slough

LOE ID:	15118
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1695
Number of Exceedances:	475

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 475 of 1695 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	11187
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	11186
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter

	and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	11185
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	11184
Pollutant:	pH
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a states the following for Marine Habitat beneficial uses: The pH value shall not be depressed below 7.0 or raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	11183
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data

	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	15121
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	1695
Number of Exceedances:	580
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 580 of 1695 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	

Guideline Reference:

Spatial Representation: Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]

Temporal Representation: Data was collected over the time period 1/20/1990-10/10/2006.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID: 15120

Pollutant: pH

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 1695

Number of Exceedances: 580

Data and Information Type: PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 580 of 1695 samples exceed the criterion for pH.

Data Reference: Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006
Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006
Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.

Objective/Criterion Reference: Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:

Guideline Reference:

Spatial Representation: Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]

Temporal Representation: Data was collected over the time period 1/20/1990-10/10/2006.

Environmental Conditions: Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information: QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place

	and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38685, pH **Region 3**

Elkhorn Slough

LOE ID:	15119
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	1695
Number of Exceedances:	475
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 475 of 1695 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a states the following for Marine Habitat beneficial uses: The pH value shall not be depressed below 7.0 or raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID 39138 **Region 3**

Elkhorn Slough

Pollutant:	**Ammonia**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of the 14 samples exceed the water quality objective for aquatic life protection. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of the 14 samples exceed the water quality objective for aquatic life protectionand this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39138, Ammonia **Region 3**

Elkhorn Slough

LOE ID:	9386
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39138, Ammonia **Region 3**

Elkhorn Slough

LOE ID:	9387
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39138, Ammonia **Region 3**

Elkhorn Slough

LOE ID:	50108
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4) .
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39138, Ammonia **Region 3**

Elkhorn Slough

LOE ID:	50097
Pollutant:	Ammonia (Unionized)
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Ammonia as N, Unionized.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin General Objective, Chapter III, Section II.A.2 (General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries) states that the discharge of wastes shall not cause concentrations of unionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters (page III-4).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**39192**	**Region 3**
Elkhorn Slough		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Forty-four of the 443 samples exceed the evaluation guideline used to interpret the narrative water quality objective for bio-stimulation risk. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Forty-four of the 443 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	52928
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 5 of 43 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect

	interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	52921
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	43
Number of Exceedances:	5
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 5 of 43 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data

	were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	50109
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	50098

Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Chlorophyll a.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	52820
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	96

Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 10 of 96 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	52813
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	96
Number of Exceedances:	10
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 10 of 96 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	9384
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 25 samples

	exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 3/29/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	9383
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	25
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 25 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1

	Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 3/29/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	15209
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	277
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 28 of 277 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water

	Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKRBR - Reserve Bridge, 306ELKSTB - Strawberry Rd, 306ELKKPD - Kirby Park, 306ELKAPC - Azevedo Pond, Central, 306ELKRSM - Reserve, South Marsh, 306ELKAPS - Azevedo Pond, South, 306ELKHLW - Hudson's Landing West, 306ELKAPN - Azevedo Pond, North, 306ELKHLE - Hudson's Landing East, 306ELKCAT - Cattail Swale, 306ELKROK - Rookery Pond]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39192, Chlorophyll-a **Region 3**

Elkhorn Slough

LOE ID:	15223
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	277
Number of Exceedances:	28
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 28 of 277 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006

	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKRBR - Reserve Bridge, 306ELKSTB - Strawberry Rd, 306ELKKPD - Kirby Park, 306ELKAPC - Azevedo Pond, Central, 306ELKRSM - Reserve, South Marsh, 306ELKAPS - Azevedo Pond, South, 306ELKHLW - Hudson's Landing West, 306ELKAPN - Azevedo Pond, North, 306ELKHLE - Hudson's Landing East, 306ELKCAT - Cattail Swale, 306ELKROK - Rookery Pond]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**39514**	**Region 3**
Elkhorn Slough		

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Ten of the 72 samples exceed the water quality objective for contact recreation (i.e. swimming) but none of the samples exceed the water quality objective for non-contact recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

	This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Ten of the 72 samples exceed the water quality objective for contact recreation (i.e. swimming) but none of the samples exceed the water quality objective for non-contact recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 39514, Escherichia coli (E. coli) **Region 3**

Elkhorn Slough

LOE ID:	14071
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 2 monitoring sites [308ELK_CCL - Elkhorn Slough at N. Kirkby Park, 306ELJ_CCL - Elkhorn Slough at N. Jetty]
Temporal Representation:	Data was collected over the time period 1/22/2002-12/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39514, Escherichia coli (E. coli) **Region 3**

Elkhorn Slough

LOE ID:	11168

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 12 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39514, Escherichia coli (E. coli) Region 3

Elkhorn Slough

LOE ID:	11167
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	12
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 3 of 12 samples

	exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39514, Escherichia coli (E. coli) **Region 3**

Elkhorn Slough

LOE ID:	14070
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 2 monitoring sites [308ELK_CCL - Elkhorn Slough at N. Kirkby Park, 306ELJ_CCL - Elkhorn Slough at N. Jetty]
Temporal Representation:	Data was collected over the time period 1/22/2002-12/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39514, Escherichia coli (E. coli) **Region 3**

Elkhorn Slough

LOE ID:	18421
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. E. coli is a fecal coliform.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39514, Escherichia coli (E. coli) **Region 3**

Elkhorn Slough

LOE ID:	18420
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	15
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 7 of 15 samples exceed the criterion for Escherichia coli.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39514, Escherichia coli (E. coli) **Region 3**

Elkhorn Slough

LOE ID:	50083
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Escherichia coli.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]

Temporal Representation:	Data was collected on a single day 2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 38801 Region 3

Elkhorn Slough

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two of the 21 samples exceed the water quality objective for contact recreation (i.e. swimming) and none of the samples exceed the water quality objective for non-contact recreation. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 21 samples exceed the water quality objective for contact recreation (i.e. swimming) and none of the samples exceed the water quality objective for non-contact recreation and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38801, Fecal Coliform Region 3

Elkhorn Slough

LOE ID:	50085
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38801, Fecal Coliform **Region 3**

Elkhorn Slough

LOE ID:	50072
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation

	uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 38801, Fecal Coliform **Region 3**

Elkhorn Slough

LOE ID:	11166
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	19
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 6/1/1999-12/18/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38801, Fecal Coliform **Region 3**

Elkhorn Slough

LOE ID:	11165
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	19
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 2 of 19 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 ml.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 6/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **39420** **Region 3**

Elkhorn Slough

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Temperature Evaluation Guideline (Moyle 1976) is not relevant for this water body because based on the recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008), steelhead populations have not been documented in the Elkhorn Slough. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Temperature Evaluation Guideline (Moyle 1976) is not relevant for this water body. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the Temperature Evaluation Guideline (Moyle 1976) is not relevant for this waterbody as no known steelhead populations have been documented there.

Line of Evidence (LOE) for Decision ID 39420, Temperature, water **Region 3**

Elkhorn Slough

LOE ID:	15228
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1782
Number of Exceedances:	416
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 416 of 1782 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39420, Temperature, water **Region 3**

Elkhorn Slough

LOE ID:	18690
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 14 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 4 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge, 306-ELKHO-31 - Elkhorn Slough Kirby Park]
Temporal Representation:	Data was collected over the time period 5/17/2003-5/6/2006. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39420, Temperature, water **Region 3**

Elkhorn Slough

LOE ID:	12967
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Diurnal Dissolved Oxygen Sampling (DO) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 7/6/1999-10/6/1999. Diurnal monitoring conducted in summer months at all CCAMP monitoring sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39420, Temperature, water **Region 3**

Elkhorn Slough

LOE ID:	12985
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	24
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 24 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 3/1/1999-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39420, Temperature, water **Region 3**

Elkhorn Slough

LOE ID:	50069
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Water Temperature.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39420, Temperature, water **Region 3**

Elkhorn Slough

LOE ID:	52974
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 8 of 47 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California

Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

DECISION ID **39433** **Region 3**

Elkhorn Slough

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. The turbidity Evaluation Guideline (Sigler et al., 1984) is not relevant for this water body because based on the recent publication (Steelhead/Rainbow Trout (Oncorhynchus mykiss) Resources South of the Golden Gate, California (Becker, G.S and I.J Reining, October 2008), steelhead populations have not been documented in the Elkhorn Slough. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The turbidity Evaluation Guideline (Sigler et al., 1984) is not relevant for this water body. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because the Turbidity Evaluation Guideline (Sigler et al., 1984) is not relevant for this water body .

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	52966
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	8
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 8 of 47 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	52959
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	47
Number of Exceedances:	12
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 12 of 47 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water

	Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	50113
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [

	306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	50068
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 2 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. (Basin Plan)
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile salmonid growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	18745
Pollutant:	Turbidity

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 3 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	18744
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Coastal Watershed Council (Snapshot day monitoring) (R3_Snap) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: Monterey Bay National Marine Sanctuary Volunteer Monitoring Network Data. 2003-2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 3 monitoring sites [306-ELKHO-34 - Elkhorn Slough, 306-ELKHO-32 - Elkhorn Slough Hudson's Landing, 306-ELKHO-33 - Elkhorn Slough South Marsh Bridge]
Temporal Representation:	Data was collected on a single day 5/17/2003. Coastal Watershed Council Snapshot Day Monitoring is conducted annually.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	State Board approved QAPP. Multiple errors were identified in data and were flagged or fixed by RB staff (in communication with Project staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	12987
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of

	five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	12986
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	12
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP Salinas (Salinas) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 12 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCAMP Salinas Toxicity data Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/23/2006-12/18/2006. Salinas watershed is one of five annual rotation areas that are monitored for conventional pollutants by CCAMP staff monthly for one year. Toxicity monitoring is conducted twice during the rotation year (winter and summer) at a subset of sites.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	15274
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	1726
Number of Exceedances:	432
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 432 of 1726 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39433, Turbidity **Region 3**

Elkhorn Slough

LOE ID:	15261
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat

Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	1726
Number of Exceedances:	432
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Elkhorn Slough to determine beneficial use support and results are as follows: 432 of 1726 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 12 monitoring sites [306ELKAPN - Azevedo Pond, North, 306ELKAPC - Azevedo Pond, Central, 306ELKAPS - Azevedo Pond, South, 306ELKRBR - Reserve Bridge, 306ELKRSM - Reserve, South Marsh, 306ELKSTB - Strawberry Rd, 306ELKRNM - Reserve, North Marsh, 306ELKKPD - Kirby Park, 306ELKHLE - Hudson's Landing East, 306ELKHLW - Hudson's Landing West, 306ELKROK - Rookery Pond, 306ELKCAT - Cattail Swale]
Temporal Representation:	Data was collected over the time period 1/20/1990-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**53545**	**Region 3**
Elkhorn Slough		

Pollutant:	**Nitrate**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. Twenty of the

106 nitrate samples and 17 of the 198 nitrate/nitrite samples exceed the evaluation guideline (Central Coast Region Technical Report, 2010) for Cold and Warm Freshwater Habitat. In addition, the following evidence supports the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment.

1) This water segment is also on the 303(d) List due to low dissolved oxygen concentrations. Dissolved oxygen concentrations in this water segment frequently exceed (fall below) the water quality objectives for Cold Freshwater habitat, Estuarine Habitat and Marine Habitat.
2) Chlorophyll a concentrations from the Kirby Park monitoring station ranged from zero to 40 ug/L, occasionally exceeding the screening threshold of 15 ug/L (R3 NNE Technical Report, 2010).
3) Visual observations and photos of floating algal mats from various location throughout Elkhorn Slough show thick mats covering large areas, evidence of nuisance conditions.

Although the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit to be problematic, this information is not included in this assessment as supporting evidence because the predictor tool has not been designed with brackish or estuarine systems in mind.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Twenty of the 106 nitrate samples and 17 of the 198 nitrate/nitrite samples exceed the evaluation guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Furthermore, there is evidence in support of the conclusion that nitrate contributes to or causes a bio-stimulatory effect in this water segment.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 53545, Nitrate **Region 3**

Elkhorn Slough

LOE ID:	52905
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	197
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 17 of 197 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic

	growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 53545, Nitrate **Region 3**

Elkhorn Slough

LOE ID:	52866
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	197
Number of Exceedances:	17
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 17 of 197 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 11 monitoring sites [306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKCAT - Elkhorn Slough at Cattail Swale , 306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKROK - Elkhorn Slough at Rookery Pond , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKSTB - Elkhorn Slough at Strawberry Rd]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 53545, Nitrate **Region 3**

Elkhorn Slough

LOE ID:	50054
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June

	2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	One sample result was reported as non-detect and the detection limit was above the guideline. Because these results are considered estimated, this sample, collected on 1/6/07, was not used in analysis.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53545, Nitrate **Region 3**

Elkhorn Slough

LOE ID:	50100
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach

for Developing California Nutrient Numeric Endpoints.

Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	One sample result was reported as non-detect and the detection limit was above the guideline. Because these results are considered estimated, this sample, collected on 1/6/07, was not used in analysis.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53545, Nitrate **Region 3**

Elkhorn Slough

LOE ID:	50053
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	One sample result was reported as non-detect and the detection limit was above the guideline. Because these results are considered estimated, this sample, collected on 1/6/07, was not used in analysis.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality

	Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53545, Nitrate **Region 3**

Elkhorn Slough

LOE ID:	50099
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 2 samples exceed the criterion for Nitrate as N.
Data Reference:	Salinas Rotation field data 2007
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Data for Various Pollutants in Westside San Joaquin Water Quality Coalition, 2004-2009.
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 1 monitoring site [306ELK-Elkhorn Slough at Kirby Park]
Temporal Representation:	Data was collected over the time period 1/16/2007-2/20/2007.
Environmental Conditions:	One sample result was reported as non-detect and the detection limit was above the guideline. Because these results are considered estimated, this sample, collected on 1/6/07, was not used in analysis.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). All data are flagged as appropriate.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 53545, Nitrate **Region 3**

Elkhorn Slough

LOE ID:	52840
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	105
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 20 of 105 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 9 monitoring sites [306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKSTB - Elkhorn Slough at Strawberry Rd , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 53545, Nitrate **Region 3**

Elkhorn Slough

LOE ID:	52830

Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	105
Number of Exceedances:	20
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Elkhorn Slough to determine beneficial use support and results are as follows: 20 of 105 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 9 monitoring sites [306ELKHLE - Elkhorn Slough at Hudson's Landing East , 306ELKHLW - Elkhorn Slough at Hudson's Landing West , 306ELKSTB - Elkhorn Slough at Strawberry Rd , 306ELKKPD - Elkhorn Slough at Kirby Park Dock , 306ELKRBR - Elkhorn Slough at Reserve Bridge , 306ELKRSM - Elkhorn Slough at Reserve, South Marsh (Whistle Stop Lagoon) , 306ELKAPS - Elkhorn Slough at Azevedo Pond, South , 306ELKAPC - Elkhorn Slough at Azevedo Pond, Central , 306ELKAPN - Elkhorn Slough at Azevedo Pond, North]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

DECISION ID	**38831**	**Region 3**
Elkhorn Slough		

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)

Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 44 samples exceed the water quality objective for Water Contact but none of the samples exceed the Non-Contact Recreation Basin Plan Objective for Fecal Coliform as it is applies to the Enterococcus data. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 44 samples exceed the water quality objective for Water Contact but none of the samples exceed the Non-Contact Recreation Basin Plan Objective for Fecal Coliform as it is applies to the Enterococcus data. Neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38831, Enterococcus **Region 3**

Elkhorn Slough

LOE ID:	14215
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	44
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Elkhorn Slough to determine beneficial use support and results are as follows: 0 of 44 samples exceed the criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 ml, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 ml. Enterococcus is a fecal coliform.

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 2 monitoring sites [308ELK_CCL - Elkhorn Slough at N. Kirkby Park, 306ELJ_CCL - Elkhorn Slough at N. Jetty]
Temporal Representation:	Data was collected over the time period 1/22/2002-12/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38831, Enterococcus **Region 3**

Elkhorn Slough

LOE ID:	14214
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	44
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Long Term Environmental Assessment Program (R3_CCLEAN) data for Elkhorn Slough to determine beneficial use support and results are as follows: 1 of 44 samples exceed the EPA criterion for Enterococci.
Data Reference:	Final Data File used for assessment: CCLEAN (Central Coast Long Term Environmental Assessment Program data) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in freshwater is 61 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Elkhorn Slough was collected at 2 monitoring sites [308ELK_CCL - Elkhorn Slough at N. Kirkby Park, 306ELJ_CCL - Elkhorn Slough at N. Jetty].
Temporal Representation:	Data was collected monthly over the time period 1/22/2002-12/2/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	EPA Approved QAPP.
QAPP Information Reference(s):	

DECISION ID **33901** **Region 3**

Elkhorn Slough

Pollutant:	**Pesticides**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original

Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33901, Pesticides **Region 3**

Elkhorn Slough

LOE ID:	3943
Pollutant:	Pesticides
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID **33969** **Region 3**

Elkhorn Slough

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion	2027

Date:	
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33969, Sedimentation/Siltation **Region 3**

Elkhorn Slough

LOE ID:	3944
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Soquel Lagoon**
Water Body ID: **CAE30413014199812091328 27**
Water Body Type: **Estuary**

DECISION ID **33057** **Region 3**
Soquel Lagoon

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
TMDL Name:	Soquel Lagoon Pathogens
TMDL Project Code:	593
Date TMDL Approved by USEPA:	11/17/2010
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle. Note the pollutant name has been changed from Pathogens to Indicator Bacteria 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed. There is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard. The Soquel Lagoon Pathogens TMDL was approved by USEPA on 11/17/2010.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list in the 'Being Addressed' portion of the List because applicable water quality standards are exceeded, pollutant contributes to or causes the problem but a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 33057, Indicator Bacteria **Region 3**
Soquel Lagoon

LOE ID:	4014
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded

Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID **33056** **Region 3**

Soquel Lagoon

Pollutant:	**Nitrate**
Final Listing Decision:	**Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Reason for Delisting:	Flaws in original listing
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The pollutant name has been changed from nutrients to nitrate. This pollutant is being considered for removal from the section 303(d) list under section 4.2 of the Listing Policy. Staff cannot produce the original information and or data used to place this water segment pollutant combination in the Section 303(d) list. In addition, Six LOEs for Soquel Creek (upstream of the lagoon) do not show any evidence of impairments. More specifically, CCAMP data collected between 5/1/2001 and 12/1/2004 (at the Rail Road Trestle located at the lower end of the creek and when the sand bar prevents flow to the ocean within the lagoon) there is no evidence of elevated nutrients. CCAMP data was collected monthly during the above mentioned time period at this site and resulted in 32 samples. Nitrate levels ranged between less than the detection level of the method and 0.586 mg/L as N. Orthophosphate levels ranged between 0.18 and 0.056 mg/L as P. Based on the lack of available data and information for, there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list. In addition, Six LOEs for Soquel Creek (upstream of the lagoon) do not show any evidence of impairments. More specifically, CCAMP data collected between 5/1/2001 and 12/1/2004 (at the Rail Road Trestle located at the lower end of the creek and when the sand bar prevents flow to the ocean within the lagoon) there is no evidence of elevated nutrients. CCAMP data was collected monthly during the above mentioned time period at this site and resulted in 32 samples. Nitrate levels ranged between less than the detection level of the method and 0.586 mg/L as N. Orthophosphate levels ranged between 0.18 and 0.056 mg/L as P. This data supports the delisting recommendation.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33056, Nitrate **Region 3**

Soquel Lagoon

LOE ID:	30065
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Estuarine Habitat
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Thirty two monthly grab samples collected between May 2001 and December 2004. The highest nitrate measurements in these samples is 0.18 mg/L as N.
Data Reference:	Final Data File used for assessment: CCAMP Water Quality Data_file1 Final Data File used for assessment: CCAMP Water Quality Data_file2 Final Data File used for assessment: CCAMP Water Quality Data_file3
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Central Coast Basin Plan, General Objective).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Single site located at the Rail Road trestle.
Temporal Representation:	Monthly grab samples collected between May 2001 and December 2004
Environmental Conditions:	This site is lagoon like when flows are low and the sandbar is closing the lagoon at the beach.
QAPP Information:	CCAMP data collected under the SWAMP QAPP (Puckett, M, 2002)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33056, Nitrate **Region 3**

Soquel Lagoon

LOE ID:	4013
Pollutant:	Nutrients
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 33058 Region 3

Soquel Lagoon

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33058, Sedimentation/Siltation Region 3

Soquel Lagoon

LOE ID:	4015
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **San Lorenzo River Lagoon**
Water Body ID: **CAE30412053199808280943 49**
Water Body Type: **Estuary**

DECISION ID **32748** **Region 3**
San Lorenzo River Lagoon

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Collection System Failure | Domestic Animals/Livestock | Onsite Wastewater Systems (Septic Tanks) | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	San Lorenzo River Watershed Pathogen TMDL (including San Lorenzo River, Lompico Creek, Carbonera Creek and the San Lorenzo River Estuary)
TMDL Project Code:	726
Date TMDL Approved by USEPA:	07/20/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. However, a TMDL has been approved by US EPA since the 2010 assessment cycle. Note the pollutant name has been changed from Pathogens to Indicator Bacteria. 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed. The San Lorenzo River Watershed Pathogen TMDL (including San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, Camp Evers Creek, Carbonera Creek and Lompico Creek) was approved by the Central Coast Regional Board on March 21, 2008. This TMDL was approved by USEPA 07/20/2011. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the CWA 303(d) List because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed. After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list in the 'Being Addressed' portion of the List because applicable water quality standards are exceeded, pollutant contributes to or causes the problem but a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 32748, Indicator Bacteria **Region 3**
San Lorenzo River Lagoon

LOE ID:	4006
Pollutant:	Pathogens

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Haskells Beach (Santa Barbara County)**
Water Body ID: **CAC315100122007032818343 9**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **39049** **Region 3**
Pacific Ocean at Haskells Beach (Santa Barbara County)

Pollutant: **Enterococcus**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Applicable WQS attained; reason for recovery unspecified
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Thirty three of 352 samples exceeded the geometric mean standard for enterococcus (LOEs 381, 19337, and 56237) and 20 of 250 samples exceeded the single sample maximum for enterococcus (LOEs 19338 and 56236) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). The counts above include data summarized from LOE 381 (pollutant name - Indicator Bacteria) where 21 of 228 samples exceeded the geometric mean standard for enterococcus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for removing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Five lines of evidence are available in the administrative record to assess this pollutant. Thirty three of 352 samples exceeded the geometric mean standard for enterococcus (LOEs 381, 19337, and 56237) and 20 of 250 samples exceeded the single sample maximum for enterococcus (LOEs 19338 and 56236) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because applicable water quality standards for the pollutant are not being exceeded.

Line of Evidence (LOE) for Decision ID 39049, Enterococcus **Region 3**
Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID: 56236

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	95
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 4 of 95 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at 1 monitoring site [Haskell's Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39049, Enterococcus **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	56237
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	6
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Six of the 92 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at station Haskell's Beach.
Temporal Representation: The samples were collected approximately once a week from January 2007 to September 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39049, Enterococcus **Region 3**
Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID: 19337

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 32
Number of Exceedances: 6

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 6 of 32 samples exceed the criterion for Enterococci.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at one AB411 monitoring site (Haskell's Beach)
Temporal Representation: Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 39049, Enterococcus **Region 3**
Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID: 19338

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	16
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 16 of 155 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at one AB411 monitoring site (Haskell's Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39049, Enterococcus **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	381
Pollutant:	Indicator Bacteria
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	228
Number of Exceedances:	21
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Available data indicate sufficient exceedances of bacterial indicator objectives. There were 21 out of 228 exceedances of the geomean for enterococci (USEPA, 2007).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Title 17 C.C.R. Section 7958 states: Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (A) 1,000 total coliform bacteria per 100 milliliters, if the ratio of fecal/total coliform bacteria exceeds 0.1; or (B) 10,000 total coliform bacteria per 100 milliliters; or

(C) 400 fecal coliform bacteria per 100 milliliters; or
(D) 104 enterococcus bacteria per 100 milliliters.

Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of bacteria in water from any sampling station at a public beach or public water contact sports area, shall not exceed:
(A) 1,000 total coliform bacteria per 100 milliliters; or
(B) 200 fecal coliform bacteria per 100 milliliters; or
(C) 35 enterococcus bacteria per 100 milliliters. (DHS, 1999)

Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Station ID# SBC12 (between Tecolote and Winch. Canyon Creeks)
Temporal Representation:	07/02/2001-10/31/2005
Environmental Conditions:	
QAPP Information:	Data record: 2001-2005, Santa Barbara County Health Dept.
QAPP Information Reference(s):	

DECISION ID 38544 Region 3

Pacific Ocean at Haskells Beach (Santa Barbara County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 124 samples exceeded the geometric mean standard for fecal coliform (LOEs 19313 and 56239) and 6 of 249 samples exceeded the single sample maximum for fecal coliform (LOEs 19314 and 56238) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 124 samples exceeded the geometric mean standard for fecal coliform (LOEs 19313 and 56239) and 6 of 249 samples exceeded the single sample maximum for fecal coliform (LOEs 19314 and 56238) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38544, Fecal Coliform Region 3

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	19314
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	154
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 154 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at one AB411 monitoring site (Haskell's Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38544, Fecal Coliform **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	19313
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 32 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005

	AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at one AB411 monitoring site (Haskell's Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38544, Fecal Coliform **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	56238
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	95
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Haskells Beach (Santa Barbara County) and results are as follows: 1 of 95 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at 1 monitoring site [Haskell's Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38544, Fecal Coliform **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	56239
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 92 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Haskell's Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38545 **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Fifteen of 95 samples (LOE 56240) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Three of 124 samples exceeded the geometric mean standard for total coliform (LOEs 19340 and 56257), 5 of 250 samples exceeded the single sample maximum for total coliform (LOEs 19339 and 56241), and 2 of 248 samples exceeded the fecal

coliform/total coliform ratio criteria (LOEs 19341 and 56258) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Fifteen of 95 samples (LOE 56240) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Three of 124 samples exceeded the geometric mean standard for total coliform (LOEs 19340 and 56257), 5 of 250 samples exceeded the single sample maximum for total coliform (LOEs 19339 and 56241), and 2 of 248 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19341 and 56258) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38545, Total Coliform **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	56258
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	95
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	One of the 95 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Haskell's Beach.
Temporal Representation:	The samples were collected approximately once a month from January 2007 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38545, Total Coliform — Region 3

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	56257
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 92 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at station Haskell's Beach.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to September 2008.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38545, Total Coliform — Region 3

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	56241
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	95
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 0 of 95 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at 1 monitoring site [Haskell's Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38545, Total Coliform **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	56240
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	95
Number of Exceedances:	15
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 15 of 95 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at 1 monitoring site [Haskell's Beach]
Temporal Representation:	Data was collected over the time period 1/2/2007-10/6/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38545, Total Coliform **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	19341
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	153
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 1 of 153 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at one monitoring site (Haskell's Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38545, Total Coliform **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	19340
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	32
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 3 of 32 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at one monitoring site (Haskell's Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38545, Total Coliform **Region 3**

Pacific Ocean at Haskells Beach (Santa Barbara County)

LOE ID:	19339
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	155
Number of Exceedances:	5
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Haskells Beach (Santa Barbara County) to determine beneficial use support and results are as follows: 5 of 155 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Haskells Beach (Santa Barbara County) was collected at one monitoring site (Haskell's Beach)
Temporal Representation:	Data was collected over the time period 1/5/2004 - 12/27/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Pismo Beach (San Luis Obispo County)**
Water Body ID: **CAC310260142007050112070 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **47147** **Region 3**
Pacific Ocean at Pismo Beach (San Luis Obispo County)

Pollutant: **Enterococcus**
Final Listing Decision: **List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Forty six of 206 samples exceeded the geometric mean standard for enterococcus (LOE 56303) and 25 of 213 samples exceeded the single sample maximum for enterococcus (LOE 56302) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Forty six of 206 samples exceeded the geometric mean standard for enterococcus for the water contact recreation water quality standard and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47147, Enterococcus **Region 3**
Pacific Ocean at Pismo Beach (San Luis Obispo County)

LOE ID: 56303

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	206
Number of Exceedances:	46
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Forty-six of the 206 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1560 PB4.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47147, Enterococcus **Region 3**

Pacific Ocean at Pismo Beach (San Luis Obispo County)

LOE ID:	56302
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	213
Number of Exceedances:	25
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo Beach (San Luis Obispo County) to determine beneficial use support and results are as follows: 25 of 213 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at 1 monitoring site [PB4]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 47148 Region 3

Pacific Ocean at Pismo Beach (San Luis Obispo County)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Fifty nine of 232 samples exceeded the geometric mean standard for fecal coliform (LOE 56305) and 48 of 240 samples exceeded the single sample maximum for fecal coliform (LOE 56304) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Fifty nine of 232 samples exceeded the geometric mean standard for fecal coliform (LOE 56305) and 48 of 240 samples exceeded the single sample maximum for fecal coliform (LOE 56304) for the water contact recreation water quality standard and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47148, Fecal Coliform Region 3

Pacific Ocean at Pismo Beach (San Luis Obispo County)

LOE ID:	56305
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	232
Number of Exceedances:	59
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 59 of the 232 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1560 PB4.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47148, Fecal Coliform **Region 3**

Pacific Ocean at Pismo Beach (San Luis Obispo County)

LOE ID:	56304
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	240
Number of Exceedances:	48
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Pismo Beach (San Luis Obispo County) and results are as follows: 48 of 240 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at 1 monitoring site [PB4]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.

Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 47149 Region 3

Pacific Ocean at Pismo Beach (San Luis Obispo County)

Pollutant:	**Total Coliform**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. One hundred nineteen of 241 samples (LOE 56306) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Ten of 234 samples exceeded the geometric mean standard for total coliform (LOE 56320), 3 of 241 samples exceeded the single sample maximum for total coliform (LOE 56307) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One hundred nineteen of 241 samples (LOE 56306) exceeded the shellfish harvesting water quality objective and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 47149, Total Coliform Region 3

Pacific Ocean at Pismo Beach (San Luis Obispo County)

LOE ID:	56320
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	234
Number of Exceedances:	10
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Ten of the 234 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from station 1560 PB4.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47149, Total Coliform **Region 3**

Pacific Ocean at Pismo Beach (San Luis Obispo County)

LOE ID:	56306
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	241
Number of Exceedances:	119
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Pismo Beach (San Luis Obispo County) to determine beneficial use support and results are as follows: 119 of 241 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at 1 monitoring site [PB4]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47149, Total Coliform **Region 3**

Pacific Ocean at Pismo Beach (San Luis Obispo County)

LOE ID:	56307
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	241
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Pismo Beach (San Luis Obispo County) to determine beneficial use support and results are as follows: 3 of 241 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Pismo Beach (San Luis Obispo County) was collected at 1 monitoring site [PB4]
Temporal Representation:	Data was collected over the time period 1/1/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Stillwater Cove Beach**
Water Body ID: **CAC309500422004121417473 9**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **44433** **Region 3**
Pacific Ocean at Stillwater Cove Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under sections 4.2 and 4.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Ten lines of evidence are available in the administrative record to assess this pollutant. Seventeen of 192 samples exceeded the geometric mean standard for enterococcus (LOEs 378, 20000, and 56455) and 19 of 306 samples exceeded the single sample maximum for enterococcus (LOEs 377, 20001, and 56454) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) and these do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. Twenty one advisories/warnings were posted from 1999 to 2004 (LOE 376). Rain Advisories for all beaches in the county were posted on 15 occasions from 2000 to 2004 (LOE 375).

This water body segment is identified as an AB411 beach and data collected during the time frame of April 1st to October 31st (dry weather) is assessed using a four percent exceedance percentage (section 3.3 of Listing Policy). There are two additional lines of evidence from the 2010 listing cycle for dry weather single sample and geometric mean calculations. Six of 58 samples exceeded the recreational use single sample criteria (LOE 31434) and 2 of 13 geometric mean calculations exceeded the geometric mean criteria (LOE 31435).

The sample size for the geometric mean for dry weather enterococcus sampling (LOE 31435) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 22 samples is needed to determine if a beneficial use is supported using the AB 411 binomial table specific to delisting coastal beaches (www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303d_binomial_tables.xls). Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 58 dry weather samples exceeded the recreational use single sample criteria (LOE 31434) and this exceeds the allowable frequency listed in Table 4.2 and 4.3 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that

standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	20001
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 6 of 60 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one AB411 monitoring site (Stillwater Cove)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	20000
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one AB411 monitoring site (Stillwater Cove)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	31435
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	13
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	State Water Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: geomean concentrations of Enterococcus were calculated. Two of 13 geomeans were in exceedance of the criteria (CCRWQCB, 2004d).
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	AB 411 - California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one AB411 monitoring site (Stillwater Cove)
Temporal Representation: Data was collected over the time period 4/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID: 31434

Pollutant: Enterococcus
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 58
Number of Exceedances: 6

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: State Water Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 6 of 58 AB 411 samples exceed the criterion for Enterococci.
Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: AB 411 - California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one AB411 monitoring site (Stillwater Cove)
Temporal Representation: Data was collected over the time period 4/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:
QAPP Information: QA information not available
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID: 375

Pollutant: Enterococcus
LOE Subgroup: Health Advisories
Matrix: Not Specified

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County posted Rain Advisories for all beaches in the county on 15 occasions from 2000 to 2004. Each advisory was posted for several days surrounding rain events in the county (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The rain advisories are issued for all beaches in Monterey County, including Stillwater Cove Beach (between the Beach Club and the rocky outcropping at the south end of the cove in the community of Pebble Beach).
Temporal Representation:	Rain advisories for the beaches were issued from February 2000 through November 2004.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	376
Pollutant:	Enterococcus
LOE Subgroup:	Health Advisories
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County posted 21 warnings and advisories from 1999 through 2004 for high bacteria (fecal, and Enterococcus), log mean exceedances, and total/fecal bacteria ratio exceedances. Additionally, there was one closure due to a sewage spill in 2002. Each lasted for several days (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Stillwater Cove Beach is between the Beach Club and the rocky outcropping at the south end of the cove in the community of Pebble Beach.
Temporal Representation:	Warnings and advisories for Stillwater Cove Beach were posted from 1999-2004. One closure occurred in 2002.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	378
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	81
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected 122 bacteria samples from 2001 through 2004 at Stillwater Cove Beach. Thirty-day mean concentrations of Enterococcus were calculated. Eight of 81 means were in exceedance of the criteria (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of Enterococcus in water from any sampling station at a public beach or public water contact sports area, shall not exceed 35 MPN/100 ml.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Stillwater Cove Beach is between the Beach Club and the rocky outcropping at the south end of the cove in the community of Pebble Beach.
Temporal Representation:	Samples were collected from 4/2/2001 through 6/7/2004. As an AB411 beach, Stillwater Cove Beach was sampled weekly April 1 - October 31 and monthly November 1 - March 30.
Environmental Conditions:	

QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	377
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	7
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected 122 bacteria samples from 2001 through 2004 at Stillwater Cove Beach. Seven of 122 samples were in exceedance of the single sample criterion for Enterococcus (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: The single sample maximum criterion for Enterococcus in marine waters = 104 MPN/100 ml.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Stillwater Cove Beach is between the Beach Club and the rocky outcropping at the south end of the cove in the community of Pebble Beach.
Temporal Representation:	Samples were collected from 4/2/2001 through 6/7/2004. As an AB411 beach, Stillwater Cove Beach was sampled weekly April 1 - October 31 and monthly November 1 - March 30.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	56455
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96
Number of Exceedances:	7
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Seven of the 96 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stillwater Cove.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 44433, Enterococcus **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	56454
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	124
Number of Exceedances:	6
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 6 of 124 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at 1 monitoring site [Stillwater Cove]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 42305 **Region 3**

Pacific Ocean at Stillwater Cove Beach

Pollutant: **Fecal Coliform**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Three of 111 samples exceeded the geometric mean standard for fecal coliform (LOEs 19990 and 56457) and 12 of 183 samples exceeded the single sample maximum for fecal coliform (LOEs 19991 and 56456) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 111 samples exceeded the geometric mean standard for fecal coliform (LOEs 19990 and 56457) and 12 of 183 samples exceeded the single sample maximum for fecal coliform (LOEs 19991 and 56456) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 42305, Fecal Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	19991
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	8
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 8 of 59 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal

	coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one AB411 monitoring site (Stillwater Cove)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42305, Fecal Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	19990
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 2 of 15 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one AB411 monitoring site (Stillwater Cove)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42305, Fecal Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	56457
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96
Number of Exceedances:	1
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 96 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stillwater Cove.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42305, Fecal Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	56456
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	124
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Stillwater Cove Beach and results are as follows: 4 of 124 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental

Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at 1 monitoring site [Stillwater Cove]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 41919 Region 3

Pacific Ocean at Stillwater Cove Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Zero of 190 samples exceeded the geometric mean standard for total coliform (LOEs 373, 20005, and 56459), 1 of 306 samples exceeded the single sample maximum for total coliform (LOEs 372, 20004, and 56458), and 5 of 181 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 374 and 20006) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Twenty one advisories/warnings were posted from 1999 to 2004 (LOE 371). Rain Advisories for all beaches in the county were posted on 15 occasions from 2000 to 2004 (LOE 370). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 190 samples exceeded the geometric mean standard for total coliform (LOEs 373, 20005, and 56459), 1 of 306 samples exceeded the single sample maximum for total coliform (LOEs 372, 20004, and 56458), and 5 of 181 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 374 and 20006) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41919, Total Coliform Region 3

Pacific Ocean at Stillwater Cove Beach

LOE ID:	56458
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	124
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 1 of 124 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at 1 monitoring site [Stillwater Cove]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41919, Total Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	56459
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	96
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 96 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not

	exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Stillwater Cove.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41919, Total Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	373
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	79
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected 122 bacteria samples from 2001 through 2004 at Stillwater Cove Beach. Thirty-day mean concentrations of total coliform were calculated. None of 79 means were in exceedance of the criteria (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of total coliform in water from any sampling station at a public beach or public water contact sports area, shall not exceed 1,000 MPN/100 ml.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Stillwater Cove Beach is between the Beach Club and the rocky outcropping at the south end of the cove in the community of Pebble Beach.
Temporal Representation:	Samples were collected from 4/2/2001 through 6/7/2004. As an AB411 beach, Stillwater Cove Beach was sampled weekly April 1 - October 31 and monthly November 1 - March 30.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41919, Total Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	374
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total

Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected 122 bacteria samples from 2001 through 2004 at Del Monte Beach. 30-day mean concentrations of total coliform were calculated. None of 77 means were in exceedance of the criteria. Three of 122 measurements were in violation of the criterion. All violations occurred in September of 2003 (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: Based on a single sample, the density of total coliform in water from each sampling station at a public beach or public water contact sports area shall not exceed 1,000 MPN/100 ml, if the ratio of fecal/total coliform bacteria exceeds 0.1.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Stillwater Cove Beach is between the Beach Club and the rocky outcropping at the south end of the cove in the community of Pebble Beach.
Temporal Representation:	Samples were collected from 4/2/2001 through 6/7/2004. As an AB411 beach, Stillwater Cove Beach was sampled weekly April 1 - October 31 and monthly November 1 - March 30. All violations occurred in September of 2003.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41919, Total Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	370
Pollutant:	Total Coliform
LOE Subgroup:	Health Advisories
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County posted Rain Advisories for all beaches in the county on 15 occasions from 2000 to 2004. Each advisory was posted for several days surrounding rain events in the county (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in

these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.

Objective/Criterion Reference: Placeholder reference 2006 303(d)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The rain advisories are issued for all beaches in Monterey County, including Stillwater Cove Beach (between the Beach Club and the rocky outcropping at the south end of the cove in the community of Pebble Beach).

Temporal Representation: Rain advisories for the beaches were issued from February 2000 through November 2004.

Environmental Conditions:

QAPP Information: Monterey County Health Department, Division of Environmental Health QAPP

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41919, Total Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID: 20004

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 60
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING

Data Used to Assess Water Quality: Central Coast Regional Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Coliform, Total.

Data Reference: AB 411 Data for 2004
AB 411 Data for 2005
AB 411 Data for 2006

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.

Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one monitoring site (Stillwater Cove)

Temporal Representation: Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.

Environmental Conditions:

QAPP Information: QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 41919, Total Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	20005
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 0 of 15 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one monitoring site (Stillwater Cove)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41919, Total Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	20006
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 2 of 59 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one monitoring site (Stillwater Cove)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41919, Total Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	372
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Water Contact Recreation
Number of Samples:	122
Number of Exceedances:	
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected 122 bacteria samples from 2001 through 2004 at Stillwater Cove Beach. None of 122 samples were in exceedance of the single sample criterion for total coliform (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: The single sample maximum criterion for total coliform in marine waters = 10,000 MPN/100 ml.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Stillwater Cove Beach is between the Beach Club and the rocky outcropping at the south end of the cove in the community of Pebble Beach.
Temporal Representation:	Samples were collected from 4/2/2001 through 6/7/2004. As an AB411 beach, Stillwater Cove Beach was sampled weekly April 1 - October 31 and monthly November 1 - March 30.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41919, Total Coliform **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	371
Pollutant:	Total Coliform
LOE Subgroup:	Health Advisories
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County posted 21 warnings and advisories from 1999 through 2004 for high bacteria (fecal, and Enterococcus), log mean exceedances, and total/fecal bacteria ratio exceedances. Additionally, there was one closure due to a sewage spill in 2002. Each lasted for several days (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Stillwater Cove Beach is between the Beach Club and the rocky outcropping at the south end of the cove in the community of Pebble Beach.
Temporal Representation:	Warnings and advisories for Stillwater Cove Beach were posted from 1999-2004. One closure occurred in 2002.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

DECISION ID 42447 Region 3

Pacific Ocean at Stillwater Cove Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing

status.

The sample size for the single sample maximum criteria for Escherichia coli (E. coli) (LOEs 20003) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20003) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20003) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42447, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Stillwater Cove Beach

LOE ID:	20003
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Stillwater Cove Beach to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Stillwater Cove Beach was collected at one AB411 monitoring site (Stillwater Cove)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)**
Water Body ID: **CAC309500422004121417345 8**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **33294** **Region 3**
Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these section, a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Zero of 184 samples exceeded the geometric mean standard for enterococcus (LOEs 368, 20058, and 56492) and 6 of 293 samples exceeded the single sample maximum for enterococcus (LOEs 369, 20069, and 56491) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Two additional lines of evidence are summarized from the assessment made during the 2006 listing cycle as follows: Five advisories/warnings were posted from 1999 to 2003 (LOE 367). Rain Advisories for all beaches in the county were posted on 15 occasions from 2000 to 2004 (LOE 366).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 184 samples exceeded the geometric mean standard for enterococcus (LOEs 368, 20058, and 56492) and 6 of 293 samples exceeded the single sample maximum for enterococcus (LOEs 369, 20069, and 56491) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33294, Enterococcus **Region 3**
Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID: 366

Pollutant: Enterococcus

LOE Subgroup:	Health Advisories
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County posted Rain Advisories for all beaches in the county on 15 occasions from 2000 to 2004. Each advisory was posted for several days surrounding rain events in the county (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The rain advisories are issued for all beaches in Monterey County, including Sunset Drive at Arena Beach is between beach located at Sunset Drive and Arena and rocky outcropping separating Spanish Bay from Asilomar Beach, City of Pacific Grove and Pebble Beach community.
Temporal Representation:	Rain advisories for the beaches were issued from February 2000 through November 2004.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33294, Enterococcus **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	367
Pollutant:	Enterococcus
LOE Subgroup:	Health Advisories
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County posted 5 advisories/warnings for Sunset Drive at Arena Beach from 1999 to 2003. Advisories were for high bacteria (enterococcus), (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Sunset Drive at Arena Beach is between beach located at Sunset Drive and Arena and rocky outcropping separating Spanish Bay from Asilomar Beach, City of Pacific Grove and Pebble Beach community.
Temporal Representation:	Advisories were posted in 1999, 2002, and 2003. Each was posted for a few days.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33294, Enterococcus **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	368
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	76
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County collected 113 bacteria samples from 2001 through 2004 at Sunset Drive at Arena Beach. Thirty-day mean concentrations of Enterococcus were calculated. None of 76 means were in exceedance of the criteria (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of Enterococcus in water from any sampling station at a public beach or public water contact sports area, shall not exceed 35 MPN/100 ml.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Sunset Drive at Arena Beach is between beach located at Sunset Drive and Arena and rocky outcropping separating Spanish Bay from Asilomar Beach, City of Pacific Grove and Pebble Beach community
Temporal Representation:	Samples were collected from 4/2/2001 through 6/7/2004. As an AB411 beach, Sunset Drive

	at Arena Beach was sampled weekly April 1 - October 31 and monthly November 1 - March 30.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33294, Enterococcus **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	369
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	113
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected 113 bacteria samples from 2001 through 2004 at Sunset Drive at Arena Beach. Four of 113 samples were in exceedance of the single sample criterion for Enterococcus (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: The single sample maximum criterion for Enterococcus in marine waters = 104 MPN/100 ml.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Sunset Drive at Arena Beach is between beach located at Sunset Drive and Arena and rocky outcropping separating Spanish Bay from Asilomar Beach, City of Pacific Grove and Pebble Beach community.
Temporal Representation:	Samples were collected from 4/2/2001 through 6/7/2004. As an AB411 beach, Sunset Drive at Arena Beach was sampled weekly April 1 - October 31 and monthly November 1 - March 30.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33294, Enterococcus **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	20058
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Asilomar State Beach was collected at one AB411 monitoring site (Sunset Dr. @ Arena)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33294, Enterococcus **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	20069
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 1 of 61 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Asilomar State Beach was collected at

	one AB411 monitoring site (Sunset Dr. @ Arena)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33294, Enterococcus **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	56491
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	119
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 1 of 119 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) was collected at 1 monitoring site [Sunset Dr. @ Arena]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33294, Enterococcus **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	56492
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 92 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sunset Dr. at Arena .
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38655 Region 3

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 108 samples exceeded the geometric mean standard for fecal coliform (LOEs 20056 and 56494) and 0 of 179 samples exceeded the single sample maximum for fecal coliform (LOEs 20057 and 56493) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 108 samples exceeded the geometric mean standard for fecal coliform (LOEs 20056 and 56494) and 0 of 179 samples exceeded the single sample maximum for fecal coliform (LOEs 20057 and 56493) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38655, Fecal Coliform **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	20056
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Asilomar State Beach was collected at one AB411 monitoring site (Sunset Dr. @ Arena)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38655, Fecal Coliform **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	20057
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are

	as follows: 0 of 60 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Asilomar State Beach was collected at one AB411 monitoring site (Sunset Dr. @ Arena)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38655, Fecal Coliform **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	56493
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	119
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) and results are as follows: 0 of 119 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) was collected at 1 monitoring site [Sunset Dr. @ Arena]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38655, Fecal Coliform **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	56494
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 92 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sunset Dr. at Arena .
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38695 **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 108 samples exceeded the geometric mean standard for total coliform (LOEs 20071 and 56496), 0 of 180 samples exceeded the single sample maximum for total coliform (LOEs 20070 and 56495), and 0 of 60 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20072) for the water contact

recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 108 samples exceeded the geometric mean standard for total coliform (LOEs 20071 and 56496), 0 of 180 samples exceeded the single sample maximum for total coliform (LOEs 20070 and 56495), and 0 of 60 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 20072) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38695, Total Coliform **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	56495
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	119
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 0 of 119 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) was collected at 1 monitoring site [Sunset Dr. @ Arena]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County

	follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38695, Total Coliform **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	56496
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	92
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 92 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Sunset Dr. at Arena .
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38695, Total Coliform **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	20072
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Asilomar State Beach was collected at one monitoring site (Sunset Dr. @ Arena)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38695, Total Coliform **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	20070
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Asilomar State Beach was collected at one monitoring site (Sunset Dr. @ Arena)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38695, Total Coliform **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	20071
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Asilomar State Beach was collected at one monitoring site (Sunset Dr. @ Arena)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 39082 Region 3

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 20067 and 20068 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed

to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. One of 4 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20067) and 0 of 4 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20068) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 4 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 20067) and 0 of 4 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 20068) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 39082, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	20068
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Asilomar State Beach was collected at one AB411 monitoring site (Sunset Dr. @ Arena)

Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 39082, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach)

LOE ID:	20067
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Sunset Drive at Arena Beach (part of Asilomar Beach) to determine beneficial use support and results are as follows: 1 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Asilomar State Beach was collected at one AB411 monitoring site (Sunset Dr. @ Arena)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Spanish Bay Beach**
Water Body ID: **CAC309500422004121417164 4**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **33500** **Region 3**
Pacific Ocean at Spanish Bay Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

Eight lines of evidence are available in the administrative record to assess this pollutant. Four of 190 samples exceeded the geometric mean standard for enterococcus (LOEs 364, 19983, and 56449) and 6 of 296 samples exceeded the single sample maximum for enterococcus (LOEs 365, 19984, and 56448) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Two additional lines of evidence are summarized from the assessment made during the 2006 listing cycle as follows: Nine advisories/warnings were posted from 1999 to 2003 (LOE 363). Rain Advisories for all beaches in the county were posted on 15 occasions from 2000 to 2004 (LOE 362).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Four of 190 samples exceeded the geometric mean standard for enterococcus (LOEs 364, 19983, and 56449) and 6 of 296 samples exceeded the single sample maximum for enterococcus (LOEs 365, 19984, and 56448) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 33500, Enterococcus **Region 3**
Pacific Ocean at Spanish Bay Beach

LOE ID: 19983

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at one AB411 monitoring site (Spanish Bay)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33500, Enterococcus **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	19984
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 1 of 61 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for

	Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at one AB411 monitoring site (Spanish Bay)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33500, Enterococcus **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	364
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	75
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected 110 bacteria samples from 2001 through 2004 at Spanish Bay Beach. 30-day mean concentrations of Enterococcus were calculated. None of 75 sample means were in exceedance of the criteria (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: Based on the mean of the logarithms of the results of at least five weekly samples during any 30-day sampling period, the density of Enterococcus in water from any sampling station at a public beach or public water contact sports area, shall not exceed 35 MPN/100 ml.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Spanish Bay Beach is between rocky outcropping separating Spanish Bay from Asilomar Beach and Bird Rock Road in the community of Pebble Beach.
Temporal Representation:	Samples were collected from 4/2/2001 through 6/7/2004. As an AB411 beach, Spanish Bay Beach was sampled weekly April 1 - October 31 and monthly November 1 - March 30.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33500, Enterococcus **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	363

Pollutant:	Enterococcus
LOE Subgroup:	Health Advisories
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County posted a total of 9 advisories/warnings for Spanish Bay Beach from in 1999, 2000, 2001, and 2004. The warnings were for high bacteria (fecal coliform and enterococcus). Additionally, there was one closure for a sewage spill (possible broken pipe) in 2000 (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Spanish Bay Beach is between rocky outcropping separating Spanish Bay from Asilomar Beach and Bird Rock Road in the community of Pebble Beach.
Temporal Representation:	Postings and closures are for 1999-2001 and 2004.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33500, Enterococcus **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	362
Pollutant:	Enterococcus
LOE Subgroup:	Health Advisories
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County posted Rain Advisories for all beaches in the county on 15 occasions from 2000 to 2004. Each advisory was posted for several days surrounding rain events in the county (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The rain advisories are issued for all beaches in Monterey County, including Spanish Bay Beach (between rocky outcropping separating Spanish Bay from Asilomar Beach and Bird Rock Road in the community of Pebble Beach).
Temporal Representation:	Rain advisories for the beaches were issued from February 2000 through November 2004.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33500, Enterococcus **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	365
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	110
Number of Exceedances:	2
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected 110 bacteria samples from 2001 through 2004 at Spanish Bay Beach. Two of 110 samples were in exceedance of the single sample criterion for Enterococcus (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	AB411: The single sample maximum criterion for Enterococcus in marine waters = 104 MPN/100 ml.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Spanish Bay Beach is between rocky outcropping separating Spanish Bay from Asilomar Beach and Bird Rock Road in the community of Pebble Beach.
Temporal Representation:	Samples were collected from 4/2/2001 through 6/7/2004. As an AB411 beach, Spanish Bay Beach was sampled weekly April 1 - October 31 and monthly November 1 - March 30.
Environmental Conditions:	

QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33500, Enterococcus **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	56448
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	125
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 3 of 125 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at 1 monitoring site [Spanish Bay]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33500, Enterococcus **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	56449
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	99
Number of Exceedances:	4
Data and Information Type:	Not Specified

Data Used to Assess Water Quality:	Four of the 99 geomeans exceeded the entercoccus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for enterococcus states that the entercoccus density shall not exceed 35 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Spanish Bay.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

DECISION ID 38191 Region 3

Pacific Ocean at Spanish Bay Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 113 samples exceeded the geometric mean standard for fecal coliform (LOEs 19972 and 56451) and 1 of 184 samples exceeded the single sample maximum for fecal coliform (LOEs 19973 and 56450) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 113 samples exceeded the geometric mean standard for fecal coliform (LOEs 19972 and 56451) and 1 of 184 samples exceeded the single sample maximum for fecal coliform (LOEs 19973 and 56450) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 38191, Fecal Coliform Region 3

Pacific Ocean at Spanish Bay Beach

LOE ID:	19973
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at one AB411 monitoring site (Spanish Bay)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38191, Fecal Coliform **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	19972
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at one AB411 monitoring site (Spanish Bay)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38191, Fecal Coliform **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	56451
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	97
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 97 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for fecal coliform states that the fecal coliform density shall not exceed 200 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Spanish Bay.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 38191, Fecal Coliform **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	56450

Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	124
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Spanish Bay Beach and results are as follows: 1 of 124 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at 1 monitoring site [Spanish Bay]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37838 Region 3

Pacific Ocean at Spanish Bay Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Five lines of evidence are available in the administrative record to assess this pollutant. Zero of 115 samples exceeded the geometric mean standard for total coliform (LOEs 19988 and 56453), 0 of 186 samples exceeded the single sample maximum for total coliform (LOEs 19987 and 56452), and 0 of 60 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19989) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 115 samples exceeded the geometric mean standard for total coliform (LOEs 19988 and 56453), 0 of 186 samples exceeded the single sample maximum for total coliform (LOEs 19987 and 56452), and 0 of 60 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19989) for the water contact recreation water quality standard. None of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 37838, Total Coliform **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	56453
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	99
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 99 geomeans exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean standard for total coliform states that the total coliform density shall not exceed 1000 per 100 mL. Water Quality Control Plan for Ocean Waters 2009.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Spanish Bay.
Temporal Representation:	Samples were collected approximately once a week from 2007 to 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37838, Total Coliform **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	56452
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	125
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 0 of 125 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at 1 monitoring site [Spanish Bay]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37838, Total Coliform **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	19989
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	60
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 0 of 60 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at one monitoring site (Spanish Bay)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37838, Total Coliform **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	19987
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	61
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 0 of 61 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at one monitoring site (Spanish Bay)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37838, Total Coliform **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	19988

Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at one monitoring site (Spanish Bay)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 38301 Region 3

Pacific Ocean at Spanish Bay Beach

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the geometric mean and single sample maximum criteria for Escherichia coli (E. coli) (LOEs 19985 and 19986 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19985) and 0 of 3 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19986) for the water contact recreation water quality standard (Ambient Water Quality Criteria for Bacteria, USEPA, 1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Zero of 3 samples exceeded the geometric mean standard for Escherichia coli (E. coli) (LOE 19985) and 0 of 3 samples exceeded the single sample maximum for Escherichia coli (E. coli) (LOE 19986) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 38301, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	19986
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at one AB411 monitoring site (Spanish Bay)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 38301, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Spanish Bay Beach

LOE ID:	19985
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Spanish Bay Beach to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Spanish Bay Beach was collected at one AB411 monitoring site (Spanish Bay)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Marina State Beach**
Water Body ID: **CAC309120112004121418213 3**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **47056** **Region 3**
Pacific Ocean at Marina State Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

The sample size for the single sample maximum for enterococcus (LOE 56130) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceeded the single sample maximum for enterococcus (LOE 56130) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the single sample maximum for enterococcus (LOE 56130) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47056, Enterococcus **Region 3**
Pacific Ocean at Marina State Beach

LOE ID: 56130

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Marina State Beach to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Marina State Beach was collected at 1 monitoring site [Marina State Beach]
Temporal Representation:	Data was collected over the time period 3/25/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 47057 Region 3

Pacific Ocean at Marina State Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the the single sample maximum for fecal coliform (LOE 56131) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Zero of 4 samples exceeded the single sample maximum for fecal coliform (LOE 56131) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 4 samples exceeded the single sample maximum for fecal coliform (LOE 56131) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47057, Fecal Coliform **Region 3**

Pacific Ocean at Marina State Beach

LOE ID:	56131
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Marina State Beach and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Marina State Beach was collected at 1 monitoring site [Marina State Beach]
Temporal Representation:	Data was collected over the time period 3/25/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID	33496	Region 3
Pacific Ocean at Marina State Beach		

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the shellfish harvesting water quality objective criteria for total coliform (LOEs 361 and 56132) and the sample size for the single sample maximum criteria for total coliform (LOEs 360 and 56133) are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'. Five lines of evidence are available in the administrative record to assess this pollutant. The data associated with LOE 359 (placeholder reference for assessments made prior to the 2006) is no longer available. However, it was stated that Monterey County posted Rain Advisories for all beaches in the county on 15 occasions from 2000 to 2004. Each advisory was posted for several days surrounding rain events in the county (CCRWQCB, 2004d). Four additional lines of evidence were assessed for this pollutant. Four of 19 samples (LOEs 361 and 56132) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 19 samples exceeded the single sample maximum for total coliform (LOEs 360 and 56133) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Four of 19 samples (LOEs 361 and 56132) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 19 samples exceeded the single sample maximum for total coliform (LOEs 360 and 56133) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005) and none of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 33496, Total Coliform	**Region 3**
Pacific Ocean at Marina State Beach	

LOE ID:	56132
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Marina State Beach to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Marina State Beach was collected at 1 monitoring site [Marina State Beach]
Temporal Representation:	Data was collected over the time period 3/25/2008-8/23/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33496, Total Coliform **Region 3**

Pacific Ocean at Marina State Beach

LOE ID:	56133
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Marina State Beach to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Marina State Beach was collected at 1 monitoring site [Marina State Beach]
Temporal Representation: Data was collected over the time period 3/25/2008-8/23/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33496, Total Coliform **Region 3**

Pacific Ocean at Marina State Beach

LOE ID: 360

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Water Contact Recreation

Number of Samples: 15
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING
Data Used to Assess Water Quality: Monterey County collected monthly samples at Marina State Beach in 2003 and 2004. None of the 15 single samples were in exceedance of the criterion (CCRWQCB, 2004d).
Data Reference: Placeholder reference 2006 303(d)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline: AB411: The single sample maximum criterion for total coliform in marine waters = 10,000 MPN/100 ml.
Guideline Reference: Placeholder reference 2006 303(d)

Spatial Representation: Marina State Beach - West End of Reservation Road, City of Marina
Temporal Representation: Samples were collected monthly from 2/4/2003 through 6/1/2004.
Environmental Conditions:
QAPP Information: Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 33496, Total Coliform **Region 3**

Pacific Ocean at Marina State Beach

LOE ID: 359

Pollutant: Total Coliform
LOE Subgroup: Health Advisories
Matrix: Not Specified
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Monterey County posted Rain Advisories for all beaches in the county on 15 occasions from 2000 to 2004. Each advisory was posted for several days surrounding rain events in the county (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Assembly Bill 411: Weekly monitoring is required from April to October at all beaches with more than 50,000 annual visitors or at beaches located in areas adjacent to storm drains that flow during the summer. Some counties continue testing year round. Weekly samples must be tested for three indicator organisms: total coliform, fecal coliform, and enterococcus. Beaches that fail to meet the state's criteria for any one of the three indicators are to be posted with conspicuous warning signs to notify the public of health risks associated with swimming in these areas. Closings and advisories are issued on a discretionary basis. AB 411 requires the State Water Resources Control Board (SWRCB) to post monthly beach data from coastal counties throughout the state. The surveys list beach warnings, beach closures, and rain advisories resulting from bacterial contamination.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The rain advisories are issued for all beaches in Monterey County, including Marina State Beach (West End of Reservation Road, City of Marina).
Temporal Representation:	Rain advisories for the beaches were issued from February 2000 through November 2004.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33496, Total Coliform **Region 3**

Pacific Ocean at Marina State Beach

LOE ID:	361
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Shellfish Harvesting
Number of Samples:	15
Number of Exceedances:	4
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Monterey County collected monthly bacteria samples at Seaside State Beach. Although because samples are monthly there is only 1 sample in each 30-day period, there is no limit as to how many samples must be included in the 30-day median total coliform concentration. A ten percent total coliform concentration could not be calculated either, so this criterion was used as a single (monthly) sample comparison as well. Four of 15 samples exceeded the criteria of 70/100 ml and 0 of 15 samples exceeded the criteria of 230/100 ml (CCRWQCB, 2004d).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Central Coast RWQCB Basin Plan: At all areas where shellfish may be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70/100 ml, nor shall more than ten percent of the samples

	collected during any 30-day period exceed 230/100 ml for a five-tube decimal dilution test or 330/100 ml when a three-tube decimal dilution test is used.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Marina State Beach - West End of Reservation Road, City of Marina.
Temporal Representation:	Samples were collected monthly from 2/4/2003 through 6/1/2004.
Environmental Conditions:	
QAPP Information:	Monterey County Health Department, Division of Environmental Health QAPP
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Julia Pfeiffer Burns Beach**
Water Body ID: **CAC30800041200412141854 33**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **50113** **Region 3**
Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50113, Arsenic **Region 3**
Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID: 77379

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50115** **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50115, Chlordane **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77406
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California

	Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 47884 Region 3

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47884, Chlorpyrifos **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77407
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50117** **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50117, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77408
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This

	screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	**50118**	**Region 3**
Pacific Ocean at Julia Pfeiffer Burns Beach		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50118, Dieldrin **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77409
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50119** **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50119, Endosulfan **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77410
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50120** **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50120, Endrin **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77411
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/

QAPP Information Reference(s):

DECISION ID	50121	Region 3
Pacific Ocean at Julia Pfeiffer Burns Beach		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50121, Heptachlor epoxide	**Region 3**
Pacific Ocean at Julia Pfeiffer Burns Beach	

LOE ID:	77413
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50122 Region 3

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50122, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77414
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support

Document for Describing Available Cancer Potency Values.

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50123 **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50123, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77412
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50124** **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50124, Mercury **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77415
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	50126	Region 3
Pacific Ocean at Julia Pfeiffer Burns Beach		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50126, Mirex **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77416
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50127** **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50127, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77417
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50128** **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50128, PCBs (Polychlorinated biphenyls) Region 3

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	77418
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/

QAPP Information Reference(s):

DECISION ID	50129	Region 3
Pacific Ocean at Julia Pfeiffer Burns Beach		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50129, Selenium	**Region 3**
Pacific Ocean at Julia Pfeiffer Burns Beach	

LOE ID:	77419
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Data for this assessment unit was collected by one monitoring project: Statewide Mussel Watch Program (SMWP)
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â"The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site Partington Point Julia P. Burns ASBS, PPJB.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/2/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 37401 Region 3

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceeded the single sample maximum for enterococcus (LOE 19485) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceeded the single sample maximum for enterococcus (LOE 19485) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37401, Enterococcus **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	19485
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Julia Pfeiffer Burns Beach to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Julia Pfeiffer Burns Beach was collected at one AB411 monitoring site (Julia Pfeiffer Burns State Beach)
Temporal Representation:	Data was collected over the time period 4/25/2005 - 9/6/2005. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available

QAPP Information Reference(s):

DECISION ID	37447	Region 3
Pacific Ocean at Julia Pfeiffer Burns Beach		

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceeded the single sample maximum for fecal coliform (LOE 19483) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 3 samples exceeded the single sample maximum for fecal coliform (LOE 19483) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37447, Fecal Coliform	**Region 3**
Pacific Ocean at Julia Pfeiffer Burns Beach	

LOE ID:	19483
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Julia Pfeiffer Burns Beach to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Julia Pfeiffer Burns Beach was collected at one AB411 monitoring site (Julia Pfeiffer Burns State Beach)
Temporal Representation:	Data was collected over the time period 4/25/2005 - 9/6/2005. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37446 Region 3

Pacific Ocean at Julia Pfeiffer Burns Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples exceeded the single sample maximum for total coliform (LOE 19486), and 0 of 3 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19488) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 3 samples exceeded the single sample maximum for total coliform (LOE 19486), and 0 of 3

samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19488) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 37446, Total Coliform **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	19488
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Julia Pfeiffer Burns Beach to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Julia Pfeiffer Burns Beach was collected at one monitoring site (Julia Pfeiffer Burns State Beach)
Temporal Representation:	Data was collected over the time period 4/25/2005 - 9/6/2005. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37446, Total Coliform **Region 3**

Pacific Ocean at Julia Pfeiffer Burns Beach

LOE ID:	19486
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Julia Pfeiffer Burns Beach to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Julia Pfeiffer Burns Beach was collected at one monitoring site (Julia Pfeiffer Burns State Beach)
Temporal Representation:	Data was collected over the time period 4/25/2005 - 9/6/2005. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Monastery Beach**
Water Body ID: **CAC3080001420041214184533**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **37459** **Region 3**
Pacific Ocean at Monastery Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

The sample size for the single sample maximum for enterococcus (LOEs 19226 and 56150) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 11 samples exceeded the single sample maximum for enterococcus (LOEs 19226 and 56150) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 11 samples exceeded the single sample maximum for enterococcus (LOEs 19226 and 56150) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37459, Enterococcus **Region 3**
Pacific Ocean at Monastery Beach

LOE ID: 56150

Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Monastery Beach to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California, California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monastery Beach was collected at 2 monitoring sites [Monastery Beach, Monastery Beach]
Temporal Representation:	Data was collected over the time period 12/3/2007-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37459, Enterococcus **Region 3**

Pacific Ocean at Monastery Beach

LOE ID:	19226
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monastery Beach to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monastery Beach was collected at one AB411 monitoring site (Monastery Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 9/6/2005. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 37349 Region 3

Pacific Ocean at Monastery Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the single sample maximum for fecal coliform (LOEs 19224 and 56158) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 11 samples exceeded the single sample maximum for fecal coliform (LOEs 19224 and 56158) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 11 samples exceeded the single sample maximum for fecal coliform (LOEs 19224 and 56158) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37349, Fecal Coliform — Region 3

Pacific Ocean at Monastery Beach

LOE ID:	19224
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monastery Beach to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monastery Beach was collected at one AB411 monitoring site (Monastery Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 9/6/2005. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37349, Fecal Coliform — Region 3

Pacific Ocean at Monastery Beach

LOE ID:	56158
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for

	the station named Pacific Ocean at Monastery Beach and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monastery Beach was collected at 2 monitoring sites [Monastery Beach, Monastery Beach]
Temporal Representation:	Data was collected over the time period 12/3/2007-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 37124 Region 3

Pacific Ocean at Monastery Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample sizes for the shellfish harvesting water quality objective (LOE 56159), the single sample maximum for total coliform (LOEs 19227 and 56160), and the fecal coliform/total coliform ratio criteria (LOE 19251) are insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 4 samples (LOE 56159) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 11 samples exceeded the single sample maximum for total coliform (LOEs 19227 and 56160), and 0 of 7 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19251) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 4 samples (LOE 56159) exceeded the shellfish harvesting water quality objective (Water

Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 11 samples exceeded the single sample maximum for total coliform (LOEs 19227 and 56160), and 0 of 7 samples exceeded the fecal coliform/total coliform ratio criteria (LOE 19251) for the water contact recreation water quality standard and non of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 37124, Total Coliform **Region 3**

Pacific Ocean at Monastery Beach

LOE ID:	56159
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Monastery Beach to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monastery Beach was collected at 2 monitoring sites [Monastery Beach, Monastery Beach]
Temporal Representation:	Data was collected over the time period 12/3/2007-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37124, Total Coliform **Region 3**

Pacific Ocean at Monastery Beach

LOE ID:	56160
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Monastery Beach to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monastery Beach was collected at 2 monitoring sites [Monastery Beach, Monastery Beach]
Temporal Representation:	Data was collected over the time period 12/3/2007-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37124, Total Coliform **Region 3**

Pacific Ocean at Monastery Beach

LOE ID:	19251
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monastery Beach to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005.

	Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monastery Beach was collected at one monitoring site (Monastery Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 9/6/2005. This includes AB411 monitoring. The sampling frequency is not regular.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 37124, Total Coliform **Region 3**

Pacific Ocean at Monastery Beach

LOE ID:	19227
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Monastery Beach to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Monastery Beach was collected at one monitoring site (Monastery Beach)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 9/6/2005. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Garrapata State Beach**
Water Body ID: **CAC3080001220041214185024**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **46910** **Region 3**
Pacific Ocean at Garrapata State Beach

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the single sample maximum for enterococcus for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the single sample maximum for enterococcus for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46910, Enterococcus **Region 3**
Pacific Ocean at Garrapata State Beach

LOE ID: 56385

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Garrapata State Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Garrapata State Beach was collected at 1 monitoring site [Garrapata State Beach]
Temporal Representation:	Data was collected on a single day 7/30/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 46911 Region 3

Pacific Ocean at Garrapata State Beach

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the single sample maximum for fecal colifiorm for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 1 sample exceeded the single sample maximum for fecal colifiorm for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46911, Fecal Coliform **Region 3**

Pacific Ocean at Garrapata State Beach

LOE ID:	56386
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Garrapata State Beach and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Garrapata State Beach was collected at 1 monitoring site [Garrapata State Beach]
Temporal Representation:	Data was collected on a single day 7/30/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 46912 **Region 3**

Pacific Ocean at Garrapata State Beach

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 1 sample exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 1 sample exceeded the single sample maximum for total colifiorm for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 1 sample exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 1 sample exceeded the single sample maximum for total colifiorm for the water contact recreation water quality standardand this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 46912, Total Coliform — Region 3

Pacific Ocean at Garrapata State Beach

LOE ID:	56388
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Garrapata State Beach to determine

	beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Garrapata State Beach was collected at 1 monitoring site [Garrapata State Beach]
Temporal Representation:	Data was collected on a single day 7/30/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 46912, Total Coliform **Region 3**

Pacific Ocean at Garrapata State Beach

LOE ID:	56387
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Garrapata State Beach to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Garrapata State Beach was collected at 1 monitoring site [Garrapata State Beach]
Temporal Representation:	Data was collected on a single day 7/30/2007.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Valley View (part of Carmel River St Beach)**
Water Body ID: **CAC3070005220041214181010**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **47167** **Region 3**
Pacific Ocean at Valley View (part of Carmel River St Beach)

Pollutant: **Enterococcus**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status.

The sample size for the single sample maximum criteria for enterococcus (LOE 56513) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'.

One line of evidence is available in the administrative record to assess this pollutant. One of 3 samples exceeded the single sample maximum for enterococcus (LOEs 56513) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. One of 3 samples exceeded the single sample maximum for enterococcus (LOEs 56513) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47167, Enterococcus **Region 3**
Pacific Ocean at Valley View (part of Carmel River St Beach)

LOE ID: 56513

Pollutant: Enterococcus

LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Valley View (part of Carmel River St Beach) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Valley View (part of Carmel River St Beach) was collected at 1 monitoring site [Valley View @ Scenic]
Temporal Representation:	Data was collected over the time period 3/25/2008-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID 47168 Region 3

Pacific Ocean at Valley View (part of Carmel River St Beach)

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the single sample maximum criteria for fecal coliform (LOE 56514) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for this LOE is set to 'insufficient information'. One line of evidence is available in the administrative record to assess this pollutant. Zero of 3 samples exceeded the single sample maximum for fecal coliform (LOE 56514) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of 3 samples exceeded the single sample maximum for fecal coliform (LOE 56514) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47168, Fecal Coliform **Region 3**

Pacific Ocean at Valley View (part of Carmel River St Beach)

LOE ID:	56514
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Valley View (part of Carmel River St Beach) and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Valley View (part of Carmel River St Beach) was collected at 1 monitoring site [Valley View @ Scenic]
Temporal Representation:	Data was collected over the time period 3/25/2008-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

DECISION ID	47169	Region 3

Pacific Ocean at Valley View (part of Carmel River St Beach)

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. The sample size for the shellfish harvesting water quality objective and single sample maximum criteria for total coliform criteria (LOEs 56515 and 56516 respectively) is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating for these LOEs are set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of 3 samples (LOE 56515) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 3 samples exceeded the single sample maximum for total coliform (LOE 56516) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 3 samples (LOE 56515) exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 3 samples exceeded the single sample maximum for total coliform (LOE 56516) for the water contact recreation water quality standard and neither of these exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47169, Total Coliform **Region 3**

Pacific Ocean at Valley View (part of Carmel River St Beach)

LOE ID:	56516
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	3
Number of Exceedances:	0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Valley View (part of Carmel River St Beach) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Valley View (part of Carmel River St Beach) was collected at 1 monitoring site [Valley View @ Scenic]
Temporal Representation:	Data was collected over the time period 3/25/2008-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47169, Total Coliform **Region 3**

Pacific Ocean at Valley View (part of Carmel River St Beach)

LOE ID:	56515
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Valley View (part of Carmel River St Beach) to determine beneficial use support and results are as follows: 0 of 3 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Valley View (part of Carmel River St Beach) was collected at 1 monitoring site [Valley View @ Scenic]

Temporal Representation:	Data was collected over the time period 3/25/2008-5/19/2008.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	The samples were collected for the Beach Watch program.
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Pacific Ocean at Carmel Beach at Ocean Avenue**
Water Body ID: **CAC3070005220041214175719**
Water Body Type: **Coastal & Bay Shoreline**

DECISION ID **50071** **Region 3**
Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant: **Arsenic**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50071, Arsenic **Region 3**
Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID: 77384

Pollutant: Arsenic
LOE Subgroup: Pollutant-Tissue
Matrix: Tissue

Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009.
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50073 Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50073, Cadmium **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77385
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".

Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50074 Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50074, Chlordane **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77386
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Chlordane result was calculated by summing the results for chlordane isomers: cis- and trans-nonachlor, alpha- and gamma-chlordane, and oxychlordane.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and

mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/

QAPP Information Reference(s):

DECISION ID	47882	Region 3
Pacific Ocean at Carmel Beach at Ocean Avenue		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47882, Chlorpyrifos	**Region 3**
Pacific Ocean at Carmel Beach at Ocean Avenue	

LOE ID:	77387
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50086** **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support

rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50086, DDT (Dichlorodiphenyltrichloroethane) Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77388
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)

Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50075** **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50075, Dieldrin **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77389
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The result exceeded the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID **50076** **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant: **Endosulfan**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50076, Endosulfan **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77390
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	**50077**	**Region 3**
Pacific Ocean at Carmel Beach at Ocean Avenue		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50077, Endrin **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77391
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on

	4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 35075 **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One of 109 samples exceeded the geometric mean standard for enterococcus (LOEs 19261 and 56071) and 3 of 180 samples exceeded the single sample maximum for enterococcus (LOEs 19262 and 56070) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 109 samples exceeded the geometric mean standard for enterococcus (LOEs 19261 and 56071) and 3 of 180 samples exceeded the single sample maximum for enterococcus (LOEs 19262 and 56070) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 35075, Enterococcus **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	56071
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation

Number of Samples:	93
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 93 geomeans exceeded the enterococcus objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for enterococcus shall not exceed 35 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Carmel Beach at Ocean Ave.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam by Monterey County.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35075, Enterococcus **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	56070
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 3 of 121 samples exceed the criterion for Enterococci.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for enterococcus density shall not exceed 104 per 100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at 1 monitoring site [Carmel Beach @ Ocean Ave]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35075, Enterococcus **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	19262
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for Enterococcus shall not exceed 104 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at one AB411 monitoring site (Carmel Beach @ Ocean Ave)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 35075, Enterococcus **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	19261
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 1 of 16 samples exceed the criterion for Enterococci.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the geometric mean for Enterococcus shall not exceed 35 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at one AB411 monitoring site (Carmel Beach @ Ocean Ave)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36936 Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Fecal Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero of 109 samples exceeded the geometric mean standard for fecal coliform (LOEs 19361 and 56073) and 0 of 179 samples exceeded the single sample maximum for fecal coliform (LOEs 19362 and 56072) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of 109 samples exceeded the geometric mean standard for fecal coliform (LOEs 19361 and 56073) and 0 of 179 samples exceeded the single sample maximum for fecal coliform (LOEs 19362 and 56072) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36936, Fecal Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	19362
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the single sample maximum for fecal coliform shall not exceed 400 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at one AB411 monitoring site (Carmel Beach @ Ocean Ave)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36936, Fecal Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	19361
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16

Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Fecal.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) states that the 30-day geometric mean for fecal coliform shall not exceed 200 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at one AB411 monitoring site (Carmel Beach @ Ocean Ave)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36936, Fecal Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	56072
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. E. coli data results are assessed using the Ocean Plan single sample maximum objective for fecal coliform to determine beneficial use support for the station named Pacific Ocean at Carmel Beach at Ocean Avenue. The results are as follows: 0 of 121 samples exceed the criterion for Coliform, Fecal.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for fecal coliform density shall not exceed 400 per 100ml
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at 1 monitoring site [Carmel Beach @ Ocean Ave]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36936, Fecal Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	56073
Pollutant:	Fecal Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	93
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	E. coli data results are assessed using the Ocean Plan objective for fecal coliform. A thirty day, rolling geomean was calculated for all data provided when four or more samples were collected within the 30 day period. 0 of the 93 geomeans exceeded the objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The geometric mean for fecal coliform shall not exceed 200/100 mL. California Ocean Plan (SWRCB 2006)
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Carmel Beach at Ocean Ave.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	These samples were collected for the Beach Watch progam for Monterey County.
QAPP Information Reference(s):	

DECISION ID 50078 **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the

Conclusion:	Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50078, Heptachlor epoxide **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77392
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4

	ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	**50079**	**Region 3**
Pacific Ocean at Carmel Beach at Ocean Avenue		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50079, Hexachlorobenzene/ HCB **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77393
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The results did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/

QAPP Information Reference(s):

DECISION ID	50080	Region 3
Pacific Ocean at Carmel Beach at Ocean Avenue		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50080, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	**Region 3**
Pacific Ocean at Carmel Beach at Ocean Avenue	

LOE ID:	77544
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID **50081** **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table

3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50081, Mercury **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77394
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) is 0.2 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United

States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50082 Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample was a non detect result and was not included in the assessment since the reporting limit was above the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50082, Mirex Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77395
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009, State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50083 Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50083, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77396
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the screening level. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total PAHs were calculated as the potency equivalency concentration or the sum of the toxic equivalency factors multiplied by the concentrations of: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenzo[a,h]anthracene, Chrysene,

	Fluoranthene, Fluorene, Indeno[1,2,3-c,d]pyrene, Phenanthrene, and Pyrene.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID	**50084**	**Region 3**
Pacific Ocean at Carmel Beach at Ocean Avenue		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50084, PCBs (Polychlorinated biphenyls) **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	77397
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 50085 **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 50085, Selenium **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID: 77398

Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California's Ocean Plan states that, Â“The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health".
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site CBAP.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 4/1/2009
Environmental Conditions:	
QAPP Information:	Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/
QAPP Information Reference(s):	

DECISION ID 36940 Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Total Coliform**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. Seven lines of evidence are available in the administrative record to assess this pollutant. Three of 121 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 109 samples exceeded the geometric mean standard for total coliform (LOEs 19266 and 56076), 0 of 180 samples exceeded the single sample maximum for total coliform (LOEs 19265 and 56075), and 0 of 179 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19291 and 56077) for the water contact recreation water quality standard (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2005). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three of 121 samples exceeded the shellfish harvesting water quality objective (Water Quality Control Plan: Ocean Waters of California, SWRCB, 2009). Zero of 109 samples exceeded the geometric mean standard for total coliform (LOEs 19266 and 56076), 0 of 180 samples exceeded the single sample maximum for total coliform (LOEs 19265 and 56075), and 0 of 179 samples exceeded the fecal coliform/total coliform ratio criteria (LOEs 19291 and 56077) for the water contact recreation water quality standard and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 36940, Total Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	56074
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Shellfish Harvesting
Number of Samples:	121
Number of Exceedances:	3
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 3 of 121 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The California Ocean Plan (2009) states the following: At all areas where shellfish may be harvested for human consumption, the following bacterial objectives shall be maintained throughout the water column: Ten percent of the samples collected during any 30-day period shall not exceed 230 MPN/100mL.
Objective/Criterion Reference:	California Ocean Plan Water Quality Control Plan Ocean Waters of California 2009

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at 1 monitoring site [Carmel Beach @ Ocean Ave]
Temporal Representation: Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions: Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information: The samples were collected for the Beach Watch program.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36940, Total Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID: 56076

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 93
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Zero of the 93 geomeans exceeded the total coliform objective.
Data Reference: Data for Region 3 Beach Watch.

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: The geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL. Water Quality Control Plan for Ocean Waters 2006.
Objective/Criterion Reference: Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency

Evaluation Guideline:
Guideline Reference:

Spatial Representation: The samples were collected at Carmel Beach at Ocean Ave.
Temporal Representation: The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:
QAPP Information: The samples were collected for the Beach Watch progam for Monterey County.
QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36940, Total Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID: 56075

Pollutant: Total Coliform
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 121
Number of Exceedances: 0

Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 0 of 121 samples exceed the criterion for Coliform, Total.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (SWRCB 2005) single sample maximum for total coliform density shall not exceed 10,000 per 100 mL
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at 1 monitoring site [Carmel Beach @ Ocean Ave]
Temporal Representation:	Data was collected over the time period 1/2/2007-8/30/2010.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Water Board staff assessed Beach Watch Program data that is collected by each County's Environmental Health Department. There is no QA Project Plan but instead each County follows their own Quality Assurance Procedures
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36940, Total Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	56077
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	121
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Zero of the 121 samples exceeded the total coliform objective.
Data Reference:	Data for Region 3 Beach Watch.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	The samples were collected at Carmel Beach at Ocean Ave.
Temporal Representation:	The samples were collected approximately once a week from January 2007 to August 2010.
Environmental Conditions:	
QAPP Information:	The samples were collected for the Beach Watch progam for Monterey County.

QAPP Information Reference(s):

Line of Evidence (LOE) for Decision ID 36940, Total Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	19291
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	58
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 0 of 58 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at one monitoring site (Carmel Beach @ Ocean Ave)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36940, Total Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	19266
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) 30-day geometric mean standard for total coliform states that total coliform density shall not exceed 1,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at one monitoring site (Carmel Beach @ Ocean Ave)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36940, Total Coliform **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	19265
Pollutant:	Total Coliform
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	59
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 0 of 59 samples exceed the criterion for Coliform, Total.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	California Ocean Plan (2005) single sample maximum states that total coliform density shall not exceed 10,000 MPN/100 mL.
Objective/Criterion Reference:	Water Quality Control Plan Ocean Waters of California. California Ocean Plan 2005. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at one monitoring site (Carmel Beach @ Ocean Ave)

Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

DECISION ID 36931 Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

Pollutant:	**Escherichia coli (E. coli)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under sections 3.2 and 3.3 of the Listing Policy. Under these sections, a single line of evidence is necessary to assess listing status. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'. Two lines of evidence are available in the administrative record to assess this pollutant. When compared to the Ocean Plan Objectives for Water Contact Recreation, 0 of 4 samples exceeded the single sample maximum Objective, 0 of 4 geomean assessments exceeded the geomean Objective (Ambient Water Quality Criteria for Bacteria, USEPA, 1986). Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. When compared to the Ocean Plan Objectives for Water Contact Recreation, 0 of 4 samples exceeded the single sample maximum Objective, 0 of 4 geomean assessments exceeded the geomean Objective. Neither of these exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. No new data were assessed for the 2014 listing cycle. This decision has not changed from the 2010 listing cycle.

Line of Evidence (LOE) for Decision ID 36931, Escherichia coli (E. coli) Region 3

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	19263

Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Steady State Geometric Mean Indicator Density is 126 MPN/100mL (as stated in Table 4, Page 15).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at one AB411 monitoring site (Carmel Beach @ Ocean Ave)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 36931, Escherichia coli (E. coli) **Region 3**

Pacific Ocean at Carmel Beach at Ocean Avenue

LOE ID:	19264
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	4
Number of Exceedances:	0
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed data for Pacific Ocean at Carmel Beach at Ocean Avenue to determine beneficial use support and results are as follows: 0 of 4 samples exceed the criterion for Escherichia coli.
Data Reference:	AB 411 Data for 2004 AB 411 Data for 2005 AB 411 Data for 2006
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002

Evaluation Guideline:	Single sample maximum allowable density for E. coli in freshwater is 235 MPN/100mL (as stated in Table 4, page 15)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Pacific Ocean at Carmel Beach at Ocean Avenue was collected at one AB411 monitoring site (Carmel Beach @ Ocean Ave)
Temporal Representation:	Data was collected over the time period 2/1/2005 - 10/30/2006. This includes weekly AB411 monitoring between April 1 and October 31 of each year.
Environmental Conditions:	
QAPP Information:	QA information not available
QAPP Information Reference(s):	

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Morro Bay**
Water Body ID: **CAB310220121998082714150 6**
Water Body Type: **Bay & Harbor**

DECISION ID **33409** **Region 3**
Morro Bay

Pollutant: **Oxygen, Dissolved**
Final Listing Decision: **Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Sources: Source Unknown
Expected TMDL Completion Date: 2027
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Five lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. A total of 240 of the 292 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1701 of the 1721 samples exceeded the water quality objective for dissolved oxygen in Marine Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Marine Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A total of 240 of the 292 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and 1701 of the 1721 samples exceeded the water quality objective for dissolved oxygen in Marine Habitats. Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy.
4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 33409, Oxygen, Dissolved **Region 3**
Morro Bay

LOE ID: 55368

Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	1721
Number of Exceedances:	1701
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 1721 minimum of Dissolved Oxygen concentrations had 1701 exceedences.
Data Reference:	Data for temperature and nutrients in Morro Bay and Chorro Creek
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the BM1, BS1, CM1, and CM2 stations.
Temporal Representation:	One sample was collected approximately once a day from January 2008 to December 2009.
Environmental Conditions:	
QAPP Information:	QA information contained in data submittal file and with the filename 'QA_LOE_water_sediment_tissue.pdf'.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33409, Oxygen, Dissolved **Region 3**

Morro Bay

LOE ID:	47756
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	9
Number of Exceedances:	9
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Morro Bay to determine beneficial use support and results are as follows: The daily minimum dissolved oxygen concentration was evaluated for nine sample days and three monitoring sites in Morro Bay and the criterion was exceeded all 9 times.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Morro Bay was collected at 3 monitoring sites [EMB - Embarcadero dock Pilings, 310MIT - Mitchell Lane Dock and 310SPM - State Park Marina]
Temporal Representation:	Data was collected over the time period July 27, 2005 - June 30, 2006
Environmental Conditions:	Dissolved oxygen data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the minimum value for each sample day was compared to the water quality objective as defined in Section
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

Line of Evidence (LOE) for Decision ID 33409, Oxygen, Dissolved **Region 3**

Morro Bay

LOE ID:	80
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Adverse Biological Responses
Matrix:	-N/A
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	283
Number of Exceedances:	231
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Regional Board staff is proposing that Morro Bay be listed as impaired for dissolved oxygen. The impairment is evidenced by depressed levels of dissolved oxygen measured during pre-dawn and 24-hour sampling periods. Two Hundred and thirty one data points (of a total of 283 data points) collected between 1997 and 2002 fell below the water quality objective of 7.0 mg/L (CCRWQCB, 2004o). Depressed oxygen levels were found at all sampling locations except for EEL. There were 231 out of 283 samples that exceeded the COLD dissolved oxygen water quality objective.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	MAR = Marine Habitat
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	COLD Dissolved Oxygen = 7.0 mg/L.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Morro Bay Estuary (Calwater watershed no. 31023012), San Luis Obispo County. Samples were collected at 8 locations throughout the bay: ATP, SPM, Lo2, PSP, EEL, Ch1, CSI, and SHI.
Temporal Representation:	Single measurements were taken in the Morro Bay estuary using a hand-held meter. Measurements were taken during pre-dawn conditions from 4/17/1997 through 12/132002.
Environmental Conditions:	Samples were primarily taken during pre-dawn conditions, when dissolved oxygen levels are expected to be lowest.
QAPP Information:	Samples were taken according to the Morro Bay Volunteer Monitoring Program protocols for pre-dawn sampling in the Morro Bay National Estuary Programs Quality Assurance Program Plan. The Morro Bay Volunteer Monitoring Program staff has monthly correspondence with volunteers regarding data review, meter operation, and safety. Volunteer monitors collect dissolved oxygen data according to the Morro Bay National Estuary Programs Quality Assurance Program Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33409, Oxygen, Dissolved **Region 3**

Morro Bay

LOE ID:	47758
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	27
Number of Exceedances:	14
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board staff assessed public submissions data for Morro Bay to determine beneficial use support and results are as follows: The daily median oxygen saturation value was evaluated for 27 sample days and three monitoring sites In Morro Bay and the criterion was exceeded 14 times.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Morro Bay was collected at 3 monitoring sites [EMB - Embarcadero dock Pilings, 310MIT - Mitchell Lane Dock and 310SPM - State Park Marina]
Temporal Representation:	Data was collected over the time period July 27, 2005 - June 30, 2006
Environmental Conditions:	Oxygen Saturation data were collected every 30 minutes for a minimum of 24 hours. Central Coast Water Board Staff counted the number of sample days and the daily median value for each sample day was compared to the water quality objective as defined in S
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	**32880**	**Region 3**
Morro Bay		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.5 of the Listing Policy. Under section 3.1, a single line of evidence is necessary to assess listing status. Under section 3.5, one line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of fourteen shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish beneficial use. Zero of five dissolved water samples exceeded the evaluation guideline applied to protect estuarine habitat. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to

determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of fourteen shellfish tissue samples exceeded the evaluation guideline. This does exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32880, Cadmium **Region 3**

Morro Bay

LOE ID:	85
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of 12 samples from the 4 stations were in exceedance when the data was reevaluated using USEPA and OEHHA criteria (Keeling, S. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	USEPA standard of 4.0 ppm (wet weight) and OEHHA standard of 3.0 ppm (wet weight).
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.
Temporal Representation:	Sampling occurred from 5-30-1980 to 1-20-1993.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy. Site 429.2, on 1/26/1987, 3/14/1988, 12/19/1988, 2/2/1990 and 1/20/1993 had levels over the MIS values (levels ranged from 1.01 - 1.23 ppm wet weight). Five out of five samples at site 429.2 were over MIS. One out of three samples were above MIS values at site 429.0 (6/28/1982, 1.17 ppm wet weight).

QAPP Information:	State Mussel Watch Program Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32880, Cadmium **Region 3**

Morro Bay

LOE ID:	86
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of five samples taken in Morro Bay exceeded any CTR criteria for dissolved cadmium in saltwater. Cadmium concentrations ranged from 0.0686 to 0.0349 ug/L (Keeling, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Material Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses. Water quality objective in marine environment - total concentration 0.2 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CTR Saltwater acute 42 ug/L Criterion Maximum Concentration (CMC) and saltwater chronic 9.3 ug/L Criterion Continuous Concentration (CCC) criteria is applicable.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including the inflows from the mouth Chorro and the mouth of Los Osos creeks that feed into the Bay. The stations were: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32880, Cadmium **Region 3**

Morro Bay

LOE ID:	77450
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32880, Cadmium **Region 3**

Morro Bay

LOE ID:	55336
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine

	beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49499**	**Region 3**
Morro Bay		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49499, Chlordane **Region 3**

Morro Bay

LOE ID:	55341
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental

	Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49499, Chlordane **Region 3**

Morro Bay

LOE ID:	77451
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite

	sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID **47530** **Region 3**

Morro Bay

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47530, Chlorpyrifos **Region 3**

Morro Bay

LOE ID:	77452
Pollutant:	Chlorpyrifos

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 47530, Chlorpyrifos **Region 3**

Morro Bay

LOE ID:	55342
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49516**	**Region 3**
Morro Bay		

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. The single shellfish tissue samples did not exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49516, DDT (Dichlorodiphenyltrichloroethane) Region 3

Morro Bay

LOE ID:	55381
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49516, DDT (Dichlorodiphenyltrichloroethane) Region 3

Morro Bay

LOE ID:	77453
Pollutant:	DDT (Dichlorodiphenyltrichloroethane)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The total DDTs were calculated as the sum of 4,4- and 2,4- isomers of DDT, DDE, and DDD.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999;

Guideline Reference:	Klasing, S., and R. Brodberg, 2008) Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**47171**	**Region 3**
Morro Bay		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47171, Diazinon **Region 3**

Morro Bay

LOE ID:	55343
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in shellfish tissue is 2,300 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **49527** **Region 3**

Morro Bay

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of one shellfish tissue samples exceeded the evaluation guideline. One sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of one shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49527, Dieldrin — Region 3

Morro Bay

LOE ID:	55348
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The one sample was not used in the

	assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49527, Dieldrin **Region 3**

Morro Bay

LOE ID:	77454
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	49530	Region 3
Morro Bay		

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49530, Endosulfan **Region 3**

Morro Bay

LOE ID:	77455
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total Endosulfan result was calculated by summing Endosulfan I and Endosulfan II.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.

Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49530, Endosulfan **Region 3**

Morro Bay

LOE ID:	55349
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	

QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 49532 Region 3
Morro Bay

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49532, Endrin Region 3
Morro Bay

LOE ID:	55350
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49532, Endrin **Region 3**

Morro Bay

LOE ID:	77456
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49129**	**Region 3**
Morro Bay		

Pollutant:	**Enterococcus**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Thirty-eight of 463 samples exceeded the geometric mean standard for enterococcus for the water contact recreation water quality standard (USEPA Ambient Water Quality Criteria for Bacteria -1986).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Thirty-eight of 463 samples exceed the evaluation guideline set to protect for water contact recreation (i.e. swimming, wading etc.) and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 49129, Enterococcus **Region 3**

Morro Bay

LOE ID:	47755
Pollutant:	Enterococcus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	463
Number of Exceedances:	38
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	Region 3 - Central Coast Region staff assessed R3 public submissions data for Morro Bay to determine beneficial use support and results are as follows: 38 of 463 samples exceed the criterion for Enterococci.
Data Reference:	Data from Morro Bay National Estuary Program's Volunteer Monitoring Program, May 2002-Apr. 2010
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	USEPA Ambient Water Quality Criteria for Bacteria -1986.
Objective/Criterion Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Evaluation Guideline:	Single sample maximum allowable density for Enterococci in marine waters is 104 MPN/100mL (as stated in Table 4, page 15 of the USEPA Ambient Water Quality Criteria for Bacteria -1986).
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Data for this line of evidence for Morro Bay was collected at 12 monitoring sites [310BAY - Baywood Pier Beach, 310CIN - Cuesta Inlet Shoreline, 310COL - Coleman Beach, 310MID - Midway Seep, 310PAS - Pasadena Point, 310PSS - Pismo Seep, 310SIN - Sharks Inlet, shoreline, 310SPM - State Park Marina, 310TID - Tidelands Park Dock, 310TRN - Third Street Seep North, 310TRS - Third Street Seep South, 310WIN - Windy Cove]
Temporal Representation:	Data was collected over the time period 3/7/2005 9:05:00 AM-2/16/2010 12:05:00 PM.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	All data was collected in compliance with an EPA approved QAPP
QAPP Information Reference(s):	Quality Assurance Project Plan for Morro Bay National Estuary ProgramÂ's Volunteer Monitoring Program. Jan. 12, 2010, Version 5, Draft 2

DECISION ID	49535	Region 3
Morro Bay		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of one shellfish tissue samples exceeded the evaluation guideline. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of one shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49535, Heptachlor epoxide	**Region 3**
Morro Bay	

LOE ID:	77458
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine

	beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49535, Heptachlor epoxide **Region 3**

Morro Bay

LOE ID:	55356
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing

	Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49538**	**Region 3**
Morro Bay		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49538, Hexachlorobenzene/ HCB **Region 3**

Morro Bay

LOE ID:	55357
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

	Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49538, Hexachlorobenzene/ HCB **Region 3**

Morro Bay

LOE ID:	77459
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite

	sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49542**	**Region 3**
Morro Bay		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49542, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	**Region 3**
Morro Bay	

LOE ID:	77457

Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49542, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Morro Bay

LOE ID:	55358
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **32808** **Region 3**

Morro Bay

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.5 of the Listing Policy. Under sections 3.1 and 3.5, a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant. Mercury is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy. The CTR criteria for the dissolved fraction of selected metals are applicable for the protection of aquatic life but there is no CTR criterion for dissolved mercury in the saltwater column. However, OEHHA screening values are applicable for consumption of aquatic organisms. None of the 12 tissue samples exceeded the OEHHA screening value and none of the five water samples taken were in exceedance because there are no guidelines for dissolved mercury in the saltwater column that meet the requirements of the Listing Policy. Zero of one shellfish tissue samples exceed the evaluation guideline.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination from the section 303(d) list.

This conclusion is based on the staff findings that:

1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 12 tissue samples exceeded the OEHHA screening value and none of the five water samples taken were in exceedance because there are no guidelines for dissolved mercury in the saltwater column that meet the requirements of the Listing Policy. Zero of one shellfish tissue samples exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 32808, Mercury **Region 3**

Morro Bay

LOE ID:	55366
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) with a consumption rate of 21 g/day is 0.20 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 32808, Mercury **Region 3**

Morro Bay

LOE ID:	90
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the five samples taken in Morro Bay exceeded because there are no guidelines for dissolved mercury in the saltwater column that meet the requirements of the Listing Policy (Keeling, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	There are no acute or chronic criteria for dissolved mercury in saltwater that meets the requirements of the Listing Policy.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Water was sampled from five (5) separate locations meant to represent the back, middle and front of the Bay and were also meant to represent the flow from the two creeks that feed the Bay (sites were Front Bay, Middle Bay, Back Bay, Mouth Chorro and Mouth Los Osos. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32808, Mercury **Region 3**

Morro Bay

LOE ID:	89
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 12 samples exceeded the OEHHA screening value at the 4 sampling stations (Keeling, 2003). This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy. Two samples out of eight were found to be above the EDL 85 values (0.06 ppm) with concentrations of 0.136 ppm and 0.061 ppm wet weight on 1/26/1987 and 1/20/1993 respectively. Both samples were taken at site 429.2.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	OEHHA screening values of 0.3 ppm.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.
Temporal Representation:	Sampling occurred from 5-30-1980 to 1-20-1993.
Environmental Conditions:	
QAPP Information:	State Mussel Watch Program Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID	49548	Region 3
Morro Bay		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero shellfish tissue samples exceeded the evaluation guideline. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of zero shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49548, Mirex	**Region 3**
Morro Bay	

LOE ID:	55367
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine

	beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49548, Mirex **Region 3**

Morro Bay

LOE ID:	77460
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water

	Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011):Â No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses.Â There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49551**	**Region 3**
Morro Bay		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One out of two shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49551, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Morro Bay

LOE ID:	77461
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The non detect result was not included in the assessment since the reporting limit was above the evaluation guideline. MDL were provided by NOAA Federal and RL were calculated by multiplying 3.18 by the MDL.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite

	sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49551, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Morro Bay

LOE ID:	55369
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 49552 Region 3

Morro Bay

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One out of two shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49552, PCBs (Polychlorinated biphenyls) Region 3

Morro Bay

LOE ID:	55379
Pollutant:	PCBs (Polychlorinated biphenyls)

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49552, PCBs (Polychlorinated biphenyls) Region 3

Morro Bay

LOE ID:	77462
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish

Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

DECISION ID	**49555**	**Region 3**
Morro Bay		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One out of two shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49555, Selenium **Region 3**

Morro Bay

LOE ID:	77463
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did not exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21

	g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 49555, Selenium **Region 3**

Morro Bay

LOE ID:	55380
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49557	Region 3
Morro Bay		

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Zero of zero shellfish tissue samples exceeded the evaluation guideline. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero shellfish tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49557, Toxaphene	Region 3

Morro Bay

LOE ID:	55390
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The one sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in shellfish tissue is 6.5 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **49560** **Region 3**

Morro Bay

Pollutant:	**Tributyltin TBT (Tributylstanne)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The single shellfish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single shellfish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49560, Tributyltin TBT (Tributylstanne) **Region 3**

Morro Bay

LOE ID:	55391
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in shellfish tissue is 1 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	32530	Region 3
Morro Bay		

Pollutant:	**Arsenic**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.5 of the Listing Policy. Under section 3.1, a single line of evidence is necessary to assess listing status. Under section 3.5, one line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish beneficial use. Zero of two shellfish tissue samples exceed the evaluation guideline applied to protect for the commercial beneficial use. Zero of five dissolved water samples exceeded the evaluation guideline applied to protect estuarine habitat. For water samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of two shellfish tissue samples exceeded the evaluation guideline. This does exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 32530, Arsenic **Region 3**

Morro Bay

LOE ID:	83
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Evaluation of the inorganic arsenic clam tissue data using the USEPA criteria resulted in 2 of 2 samples not exceeding the criteria. Sampling station 429.0, outside of the mouth of the Bay recorded levels of 0.145 ppm and 0.174 ppm inorganic arsenic. Tissue were measured at 1.45 and 1.74 ppm as total arsenic (Keeling, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	The USEPA criteria for inorganic arsenic is 1.2 ppm wet weight and the OEHHA criteria is 1.0 ppm wet weight for total arsenic.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Four sites were sampled on Morro Bay. One station was evaluated for this listing: 429.0. There were a total of 4 sampling stations: 427.0, 428.5, 429.0 and 429.2.
Temporal Representation:	Site 429.0 was sampled on 6/28/1982, 1/21/1983 and 5/3/1983. Sampling for the remaining three stations occurred from 5-30-1980 to 1-20-1993.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
QAPP Information:	State Mussel Watch Program Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32530, Arsenic **Region 3**

Morro Bay

LOE ID:	84
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the five samples taken at the 5 stations exceeded any of the CTR dissolved arsenic criteria in the water column (Keeling, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CTR saltwater acute 69 ug/l Criterion Maximum Concentration (CMC) and saltwater chronic 36 ug/l Criterion Continuous Concentration (CCC) criteria are applicable for the protection of aquatic life.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including inflows from the mouths of Chorro and Los Osos Creeks who each feed the Bay. These stations were: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32530, Arsenic **Region 3**

Morro Bay

LOE ID:	77449
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Shellfish
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Mussel Watch Project data for Morro Bay to determine beneficial use support and results are as follows: The single result did exceed the guideline. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the

	guideline.
Data Reference:	State Mussel Watch Program Data 1977-2000; Winter 2007-Winter 2009. State Water Resources Control Board
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Samples are collected by hand from three sub-locations for each site. The composite sample was collected from site MBVG.
Temporal Representation:	Representative samples of locally abundant species were collected during the winter on 3/23/2009
Environmental Conditions:	
QAPP Information:	"Samples were collected as part of the State Water Board's Mussel Watch Program which is a part of the National Oceanic Administration's (NOAAs) National Status and Trends (NS&T). Mussels are shipped to NOAAs contract labs for analysis of trace constituents and mussel condition. Analytical protocols follow those approved by NOAAs NS&T Program Additional background information can be found at: http://ccma.nos.noaa.gov/stressors/pollution/nsandt/"
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32530, Arsenic **Region 3**

Morro Bay

LOE ID:	55335
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Morro Bay to determine beneficial use support and results are as follows: The one sample did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline. The three replicates were averaged prior to assessment.

Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	A sample was collected from station 310MORO01. The sample for station 310MORO19 was missing. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	32892	Region 3
Morro Bay		

Pollutant:	**Aluminum**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Aluminum is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy. The CTR criteria for the dissolved fraction of selected metals are applicable for the protection of aquatic life but there is no CTR criterion for dissolved aluminum and there is no criterion or guideline for aluminum in tissue that meets the requirement of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination by it self on the section 303(d) list.

This conclusion is based on the staff findings that:

1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No exceedances of CTR criteria were recorded and no exceedances of aluminum in tissue were recorded because there is no criterion or guidelines for the dissolved fraction of aluminum or aluminum in tissue that meet the requirements of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32892, Aluminum **Region 3**

Morro Bay

LOE ID:	81
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Originally, one out of 12 analyzed samples exceeded the EDL 85 of 138.43 ppm. However, no exceedances are currently recorded because there are no criteria or guidelines for aluminum in tissue that meet the requirements of the Listing Policy (Keeling, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	There are no tissue criteria for Aluminum.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	There were four stations sampled: 427.0, 428.5, 429.0 and 429.2.
Temporal Representation:	Site 429.0 was sampled on 6/28/1982, 1/21/1983 and 5/3/1983. Site 429.2 was sampled on 1/26/1987, 3/14/1988, 12/19/1988, 2/2/1990 and 1/20/1993. Site 427.0 was sampled 5-30-1980 and 12-14-1980. Site 428.5 was sampled 5-30-1980 and 12-14-1980.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy (section 6.1.3.2).
QAPP Information:	State Mussel Watch Program Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32892, Aluminum **Region 3**

Morro Bay

LOE ID:	82
Pollutant:	Aluminum
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	No exceedances were recorded for all 5 samples because there are no criterion or guidelines for the dissolved fraction of aluminum that meet the requirements of the Listing Policy (Keeling, 2003). This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	The CTR criteria for the dissolved fraction of selected metals are applicable for the protection of aquatic life but there are no criteria or guidelines for the dissolved fraction of aluminum that meet the requirements of the Listing Policy.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	There were five sampling sites throughout Morro Bay. Locations represented the back, middle, and front of the Bay including inflows from Chorro and Los Osos Creeks. The stations were: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID **32393** **Region 3**

Morro Bay

Pollutant:	**Barium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the

samples exceed the water quality standards because there is no dissolved barium water quality objective, guideline or criteria for the protection of aquatic live in marine waters.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. A guideline for barium is not available that complies with the requirements of section 6.1.3 of the Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32393, Barium **Region 3**

Morro Bay

LOE ID:	93
Pollutant:	Barium
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the five samples taken in Morro Bay, were in exceedance because there is no barium criterion or guideline for barium in marine waters (Keeling, S. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including inflows from the mouth Chorro and the mouth Los Osos creeks that feed into the Bay. The stations were: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID **33474** **Region 3**

Morro Bay

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Cadmium is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy. There are also no evaluation guideline for the dissolved fraction of chromium for the protection of aquatic life in marine waters that meets the requirements of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination by it self on the section 303(d) list. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the five samples taken can be compared with the established water quality objective because the established water quality objective available for comparison is in the total form of chromium and the available data is reported in the dissolved fraction. None of the 12 tissue samples could also not be evaluated because there is no numeric criteria or guideline that meets the requirements of the Listing Policy for chromium in tissue. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 33474, Chromium — Region 3

Morro Bay

LOE ID:	88
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the five samples taken can be compared with the established water quality objective because the established water quality objective is in the total form of chromium

	and the available data is reported in the dissolved fraction (Keeling, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	There is no evaluation guideline for the dissolved fraction of chromium for the protection of aquatic like in marine waters that meets the requirements of the Listing Policy.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including inflows from the mouth of Chorro and the mouth of Los Osos creeks that feed into the Bay. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 33474, Chromium **Region 3**

Morro Bay

LOE ID:	87
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Total
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	None of the 12 samples could be evaluated because there are no numeric criteria or guidelines that meets the requirements of the Listing Policy for chromium in tissue (Keeling, 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	There is no numeric criteria or guideline that meets the requirements of the Listing Policy for chromium in tissue.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.
Temporal Representation:	Site 429.0 was sampled on 6/28/1982, 1/21/1983 and 5/3/1983. Site 429.2 was sampled on 1/26/1987, 3/14/1988, 12/19/1988, 2/2/1990 and 1/20/1993. Sampling for all other sites occurred from 5-30-98 to 1-20-93.
Environmental Conditions:	This is one of five metals originally included in the 1996-303(d) metals listing. The listing was originally based on exceedances of Median International Standards (MIS) and Elevated Data Levels (EDL) guidelines for State Mussel Watch tissue data. The MIS and EDL guidelines do not meet the requirements of the Listing Policy.

QAPP Information:	State Mussel Watch Program Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID **32809** **Region 3**

Morro Bay

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The CTR copper saltwater acute 4.8 ug/l Criterion Maximum Concentration (CMC) and saltwater chronic 3.1 ug/l Criterion Continuous Concentration (CCC) criteria as well as the copper USFWS effects value of 15 ppm (wet weight) are applicable. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the five water samples taken exceeded any of the CTR dissolved copper criteria in the water column. Dissolved copper concentrations ranged from 0.815 to0.262 ug/l. There were also no exceedances for the 12 copper samples in tissue. Tissue concentration measured from 0.76 to 3.13 ppm. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32809, Copper **Region 3**

Morro Bay

LOE ID:	92
Pollutant:	Copper
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Not Recorded
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	12
Number of Exceedances:	0

Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	There were no exceedances of the 12 samples for copper in tissue for all 4 stations. Tissue concentration measured from 0.76 to 3.13 ppm (Keeling, S. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	US Fish and Wildlife Biological Effects value for copper is 15 ppm.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.
Temporal Representation:	Sampling occurred from 5-30-1980 to 1-20-1993.
Environmental Conditions:	
QAPP Information:	State Mussel Watch Program Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32809, Copper **Region 3**

Morro Bay

LOE ID:	91
Pollutant:	Copper
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the five samples taken at the 5 stations exceeded any of the CTR dissolved copper criteria in the water column. Dissolved copper concentrations ranged from 0.815 to 0.262 µg/L (Keeling, S. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses. The CTR criteria for the dissolved fraction of copper is applicable for the protection of aquatic life.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CTR Saltwater acute 4.8 µg/L Criterion Maximum Concentration (CMC) and saltwater chronic 3.1 µg/L Criterion Continuous Concentration (CCC) criteria.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including the inflows from the mouth Chorro and the mouth of Los Osos creeks that feed into the Bay. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID	34040	Region 3
Morro Bay		

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. There is no criteria or guideline available for lead in tissue that meets the requirements of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.No exceedances were recorded because there is no criteria or guideline available for lead in tissue that meets the requirements of the Listing Policy. 4.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34040, Lead	**Region 3**
Morro Bay	

LOE ID:	98
Pollutant:	Lead
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Not Recorded
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	No exceedances were recorded because there is no criteria or guideline available for lead in tissue that meets the requirements of the Listing Policy (Keeling, S. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	There is no criteria or guideline available for lead in tissue that meets the requirements of

	the Listing Policy.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	There were five sampling sites samples throughout Morro Bay. Locations represented the back, middle, and front of the Bay including inflows from Chorro and Los Osos Creeks.
Temporal Representation:	Samples were taken on April 29 and May 4-5, 2002.
Environmental Conditions:	
QAPP Information:	State Mussel Watch Program Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID 32632 Region 3

Morro Bay

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. One line of evidence pertains to Nickel concentrations in the saltwater column, and the other pertains to Nickel concentrations in tissue. An insufficient number of samples exceed the CTR chronic-CCC criteria and there is no applicable guidelines to assess Nickel in tissue. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.One of five samples exceeded the CTR chronic criteria and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32632, Nickel Region 3

Morro Bay

LOE ID:	95
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Not Recorded

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	No standards exist. Tissue values ranged from 0.6 to 1.08 ppm for all 12 samples at all 4 sites (Keeling, S. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	There is no criteria or guideline for Nickel in tissue that meets the requirement of the Listing Policy.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Four sites were sampled on Morro Bay: 427.0, 428.5, 429.0, and 429.2.
Temporal Representation:	Sampling occurred from 5-30-1980 to 1-20-1993.
Environmental Conditions:	
QAPP Information:	State Mussel Watch Quality Assurance Plan.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 32632, Nickel **Region 3**

Morro Bay

LOE ID:	94
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	One of five samples (at the mouth of Chorro Creek - 11.300 ug/l) exceeded the CTR-chronic CCC guideline and no sample exceeded the Acute CMC-CTR guideline concentration (Keeling, S. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses. Water quality objective in marine environment - total concentration 2 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	CTR dissolved Nickel Saltwater acute is 74 ug/l (CMC) and saltwater chronic is 8.2 ug/l(CCC) criteria applicable for the protection of aquatic life in saltwater.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including inflows from the mouth of the Chorro and the mouth of Los Osos creeks that that feed the Bay. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.

Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID 32601 Region 3
Morro Bay

Pollutant:	**Vanadium (fume or dust)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. It is not possible to determine exceedances of any standard because there are no guidelines for dissolved Vanadium in the saltwater column for the protection of aquatic life or any applicable guideline for Vanadium in tissue that meets the requirements of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.A guideline for vanadium is not available that complies with the requirements of section 6.1.3 of the Policy. 4.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32601, Vanadium (fume or dust) Region 3
Morro Bay

LOE ID:	96
Pollutant:	Vanadium (fume or dust)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the five samples taken were found to exceed because there is no criterion or

	guideline for dissolved Vanadium in the saltwater column for the protection of aquatic life that meets the requirements of the Listing Policy (Keeling, S. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including inflow from the mouth Chorro and mouth Los Osos creeks that feed into the Bay. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID	**32649**	**Region 3**
Morro Bay		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the samples in the water column exceed any of the CTR criteria for dissolved Zinc for the protection of aquatic life. In addition there is no criteria or guideline for Zinc in tissue that meets the requirements of the Listing Policy. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.No samples exceeded any of the CTR criteria for the protection of aquatic life in the saltwater column. In addition, it was not possible to evaluate zinc in tissue samples because there is no guideline that meets the requirement of the Listing. The sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4.Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation:	No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32649, Zinc **Region 3**

Morro Bay

LOE ID:	97
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Estuarine Habitat
Number of Samples:	5
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the five samples taken in Morro Bay exceeded any of the dissolved zinc acute or chronic criteria (Keeling, S. 2003).
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses. Water quality objective in marine environment - total concentration 20 ppb.
Objective/Criterion Reference:	Placeholder reference 2006 303(d)
Evaluation Guideline:	Dissolved Zinc CTR Saltwater acute (CMC) criterion is 90 ug/L and saltwater chronic (CCC) criterion is 81 ug/L for the protection of aquatic life in the water column.
Guideline Reference:	Placeholder reference 2006 303(d)
Spatial Representation:	Water was sampled from five (5) separate locations representing the back, middle and front of the Bay including inflows from the mouth of Chorro and the mouth of Los Osos creeks that feed the Bay. The stations are: Back Bay, Mouth Los Osos, Mouth Chorro, Middle Bay and Front Bay.
Temporal Representation:	Water was sampled on March 8, 2001.
Environmental Conditions:	
QAPP Information:	Battelle Laboratory Quality Assurance Plan.
QAPP Information Reference(s):	

DECISION ID **32506** **Region 3**

Morro Bay

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Boat Discharges/Vessel Wastes | Domestic Pet Waste | Groundwater Loadings | Natural Sources | Onsite Wastewater Systems (Septic Tanks) | Other | Transient encampments | Urban Runoff/Storm Sewers
TMDL Name:	Morro Bay Pathogens
TMDL Project Code:	22

Date TMDL Approved by USEPA:	01/20/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. The decision has not changed. Note the pollutant name has been changed from Pathogens to Indicator Bacteria This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. The Morro Bay Pathogens TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32506, Indicator Bacteria **Region 3**

Morro Bay

LOE ID:	78
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

DECISION ID **32497** **Region 3**

Morro Bay

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (being addressed by USEPA approved TMDL)**

Last Listing Cycle's Final Listing Decision:	List on 303(d) list (being addressed by USEPA approved TMDL)(2012)
Revision Status	Original
Sources:	Agriculture | Erosion/Siltation | Grazing-Related Sources | Habitat Modification | Highway/Road/Bridge Construction | Land Development
TMDL Name:	Morro Bay Sediment
TMDL Project Code:	242
Date TMDL Approved by USEPA:	01/20/2004
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. The Morro Bay Sediment TMDL was approved by RWQCB on May 16, 2003 and subsequently approved by USEPA on January 20, 2004. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 32497, Sedimentation/Siltation **Region 3**

Morro Bay

LOE ID:	77
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference 2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	
Objective/Criterion Reference:	
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	
Temporal Representation:	
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

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Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Monterey Harbor**
Water Body ID: **CAB30912014199808271607 47**
Water Body Type: **Bay & Harbor**

DECISION ID **40992** **Region 3**
Monterey Harbor

Pollutant: **Metals**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This decision for the general category of 'Metals' is being replaced by individual decisions for each of the metals for which there are data. This water segment is being assessed for a full suite metals including copper, lead, mercury and zinc. Those individual decisions replace this generic decision for Â‘metalsÂ’.

This decision for Â‘metalsÂ’ was made prior to 2006 and the supporting data and other information are not held in an assessment database. The historic administrative record does not include specific data for this decision.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision, using the generic pollutant name metals, is being replaced by several decisions for each of the specific metals.

Line of Evidence (LOE) for Decision ID 40992, Metals **Region 3**
Monterey Harbor

LOE ID: 3964

Pollutant: Metals
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Marine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: Placeholder reference pre-2006 303(d)

SWAMP Data: Non-SWAMP

Water Quality Objective/Criterion: Unspecified

Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 51704 Region 3

Monterey Harbor

Pollutant:	**Aldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 51704, Aldrin Region 3

Monterey Harbor

LOE ID:	55313
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 51704, Aldrin **Region 3**

Monterey Harbor

LOE ID:	55312
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and

	homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42104	Region 3
Monterey Harbor		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the commercial beneficial use. Zero out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline and zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42104, Cadmium **Region 3**

Monterey Harbor

LOE ID:	15538
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42104, Cadmium **Region 3**

Monterey Harbor

LOE ID:	15537
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42104, Cadmium **Region 3**

Monterey Harbor

LOE ID:	55321
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1

Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in fish tissue is 2.2 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42104, Cadmium **Region 3**

Monterey Harbor

LOE ID:	55320
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49351	Region 3
Monterey Harbor		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines applied for commercial or warm and cold beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49351, Chlordane **Region 3**

Monterey Harbor

LOE ID:	55327
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49351, Chlordane **Region 3**

Monterey Harbor

LOE ID:	55326
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49351, Chlordane **Region 3**

Monterey Harbor

LOE ID:	55331
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49351, Chlordane **Region 3**

Monterey Harbor

LOE ID:	55325
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to

	determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**47524**	**Region 3**
Monterey Harbor		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47524, Chlorpyrifos **Region 3**

Monterey Harbor

LOE ID:	55332
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment

	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47524, Chlorpyrifos **Region 3**

Monterey Harbor

LOE ID:	55333
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.

Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID 49352 Region 3

Monterey Harbor

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample exceeded the evaluation guideline applied for the commercial beneficial use, but this sample did not exceed the evaluation guideline for the evaluation guideline applied for the cold and warm freshwater habitat beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample exceeded the evaluation guideline applied for the commercial beneficial use. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49352, DDT (Dichlorodiphenyltrichloroethane) Region 3

Monterey Harbor

LOE ID:	55324
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49352, DDT (Dichlorodiphenyltrichloroethane) Region 3

Monterey Harbor

LOE ID:	55329
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49352, DDT (Dichlorodiphenyltrichloroethane) Region 3

Monterey Harbor

LOE ID:	55328
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004

	Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49352, DDT (Dichlorodiphenyltrichloroethane) Region 3

Monterey Harbor

LOE ID:	55330
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32

	g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **47170** **Region 3**

Monterey Harbor

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 47170, Diazinon **Region 3**

Monterey Harbor

LOE ID:	55264
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in shellfish tissue is 2,300 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 47170, Diazinon — Region 3

Monterey Harbor

LOE ID:	55265

Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in fish tissue is 1,500 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42112**	**Region 3**
Monterey Harbor		

Pollutant:	**Dieldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Under section 3.6, two lines of evidence are necessary to assess listing status.

Six lines of evidence are available in the administrative record to assess this pollutant. The single shellfish tissue sample exceeded the evaluation guideline. The single fish tissue sample exceeded the evaluation guideline applied to protect the aquatic habitat beneficial uses. Zero out of zero samples exceeded the evaluation guideline applied for the commercial beneficial use because the laboratory data reporting limits were above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline and zero out of 6 sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42112, Dieldrin **Region 3**

Monterey Harbor

LOE ID:	55267
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or

	combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42112, Dieldrin **Region 3**

Monterey Harbor

LOE ID:	55266
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: One sample exceeded the guideline. Each sample consisted of 45 California mussels. Two composite samples were analyzed but one sample was not used in the assessment because the laboratory data reporting limit was above the objective, the result was not quantified above the reporting limit and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999;

	Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42112, Dieldrin **Region 3**

Monterey Harbor

LOE ID:	55275
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42112, Dieldrin **Region 3**

Monterey Harbor

LOE ID:	55276
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Dieldrin. One composite (18 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42112, Dieldrin **Region 3**

Monterey Harbor

LOE ID:	16823
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42112, Dieldrin **Region 3**

Monterey Harbor

LOE ID:	16734
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**49411**	**Region 3**
Monterey Harbor		

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49411, Endosulfan **Region 3**

Monterey Harbor

LOE ID:	55277
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most

	seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49411, Endosulfan **Region 3**

Monterey Harbor

LOE ID:	55280
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan. One composite (18 fish per composite) was generated from one species: speckled sanddab. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 49411, Endosulfan **Region 3**

Monterey Harbor

LOE ID:	55279
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan. One composite (18 fish per composite) was generated from one species: speckled sanddab. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49411, Endosulfan **Region 3**

Monterey Harbor

LOE ID:	55278
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan. One composite (18 fish per composite) was generated from one species: speckled sanddab. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **42161** **Region 3**

Monterey Harbor

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a

beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline and zero out of 6 sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42161, Endrin **Region 3**

Monterey Harbor

LOE ID:	55284
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common

	Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42161, Endrin **Region 3**

Monterey Harbor

LOE ID:	55281
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42161, Endrin **Region 3**

Monterey Harbor

LOE ID:	55282
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42161, Endrin **Region 3**

Monterey Harbor

LOE ID:	55283
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42161, Endrin **Region 3**

Monterey Harbor

LOE ID:	16433
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6

Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42161, Endrin **Region 3**

Monterey Harbor

LOE ID:	16434
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).

Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**49412**	**Region 3**
Monterey Harbor		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49412, Heptachlor — Region 3

Monterey Harbor

LOE ID:	55286
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49412, Heptachlor — Region 3

Monterey Harbor

LOE ID:	55285
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49413**	**Region 3**
Monterey Harbor		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero shellfish tissue samples exceeded the evaluation guideline. The two shellfish samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. The single fish tissue sample did not exceed the evaluation guidelines. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is

sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49413, Heptachlor epoxide **Region 3**

Monterey Harbor

LOE ID:	55289
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment

	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49413, Heptachlor epoxide **Region 3**

Monterey Harbor

LOE ID:	55290
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49413, Heptachlor epoxide **Region 3**

Monterey Harbor

LOE ID:	55291
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49413, Heptachlor epoxide **Region 3**

Monterey Harbor

LOE ID:	55292
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue

Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49414**	**Region 3**
Monterey Harbor		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not

exceed the evaluation guidelines. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49414, Hexachlorobenzene/ HCB **Region 3**

Monterey Harbor

LOE ID:	55294
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for

	skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49414, Hexachlorobenzene/ HCB **Region 3**

Monterey Harbor

LOE ID:	55293
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

	Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49415	Region 3
Monterey Harbor		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49415, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	**Region 3**
Monterey Harbor	

LOE ID:	55298
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part II Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49415, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Monterey Harbor

LOE ID:	55297
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49415, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Monterey Harbor

LOE ID:	55296
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.

Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49415, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Monterey Harbor

LOE ID:	55295
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41066**	**Region 3**
Monterey Harbor		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. Zero out of one fish tissue sample exceeded the evaluation guidelines. One out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No tissue samples exceeded the evaluation guideline and one out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

	4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41066, Mercury **Region 3**

Monterey Harbor

LOE ID:	55299
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) with a consumption rate of 21 g/day is 0.20 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 41066, Mercury **Region 3**

Monterey Harbor

LOE ID:	55300
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41066, Mercury **Region 3**

Monterey Harbor

LOE ID:	16524
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41066, Mercury **Region 3**

Monterey Harbor

LOE ID:	17315
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 6 of 6 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**49416**	**Region 3**
Monterey Harbor		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of zero fish tissue samples exceeded the evaluation guideline and zero of zero shellfish tissue samples exceeded the evaluation guideline. The samples counts are zero out of zero because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero of zero tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49416, Mirex **Region 3**

Monterey Harbor

LOE ID:	55301
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient

Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49416, Mirex **Region 3**

Monterey Harbor

LOE ID:	55302
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (18 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **49418** **Region 3**

Monterey Harbor

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. One out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. One out of two shellfish tissue samples exceeded the evaluation guideline and the single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49418, PAHs (Polycyclic Aromatic Hydrocarbons) **Region 3**

Monterey Harbor

LOE ID:	55308
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes:

	Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in fish tissue is 0.7 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49418, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Monterey Harbor

LOE ID:	55307
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: One of the two samples exceeded the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene,

	Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49420**	**Region 3**
Monterey Harbor		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49420, Selenium **Region 3**

Monterey Harbor

LOE ID:	55323
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.

QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49420, Selenium **Region 3**

Monterey Harbor

LOE ID:	55322
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	52311	Region 3
Monterey Harbor		

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect for the aquatic life beneficial use. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of zero shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.

This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No fish or shellfish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52311, Toxaphene	Region 3
Monterey Harbor	

LOE ID:	55268
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in shellfish tissue is 6.5 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52311, Toxaphene **Region 3**

Monterey Harbor

LOE ID:	55271
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Toxaphene. One composite (18 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in fish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52311, Toxaphene **Region 3**

Monterey Harbor

LOE ID:	55270
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxaphene. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52311, Toxaphene **Region 3**

Monterey Harbor

LOE ID:	55269
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxaphene. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington,

D.C.: U.S. Environmental Protection Agency

Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **52312** **Region 3**

Monterey Harbor

Pollutant:	**Tributyltin TBT (Tributylstanne)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of zero fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. One composite was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. Zero out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for the shellfish harvesting beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. No fish or shellfish tissue samples exceeded the evaluation guidelines. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52312, Tributyltin TBT (Tributylstanne) **Region 3**

Monterey Harbor

LOE ID:	55273
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Tributyltin as Sn. One composite (18 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in fish tissue is 0.66 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 52312, Tributyltin TBT (Tributylstanne) **Region 3**

Monterey Harbor

LOE ID:	55272
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in shellfish tissue is 1 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41095**	**Region 3**
Monterey Harbor		

Pollutant:	**Zinc**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in

sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Three lines of evidence are available in the administrative record to assess this pollutant. Zero of the three water samples exceed the evaluation guideline applied to protect for marine beneficial uses. Zero of six sediment sample exceeded the aquatic life evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Neither water nor sediment samples exceeded the evaluation guidelines; therefore these do not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 41095, Zinc **Region 3**

Monterey Harbor

LOE ID:	55274
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	0
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	None of the three samples exceeded the CTR value of 81 ug/L for dissolved zinc in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentrations to protect aquatic life in saline water. The CTR value is 81 ug/L.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	A total of four grab samples were collected from inside the marina basin (Sites 1, 2, 3, & 4), these were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41095, Zinc **Region 3**

Monterey Harbor

LOE ID:	17812
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41095, Zinc **Region 3**

Monterey Harbor

LOE ID:	17811
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**52398**	**Region 3**

Monterey Harbor

Pollutant:	**pH**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of the 12 samples exceed the water quality objective for Marine Habitats. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is supported and a minimum of five exceedances is needed to determine if beneficial uses are not supported using table 3.2. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of the 12 samples exceed the water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52398, pH **Region 3**

Monterey Harbor

LOE ID:	55317
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 12 minimums and maximums had no exceedences.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Monterey Harbor 1.1 Monterey Harbor 1.2* Monterey Harbor 1.3* Monterey Harbor 2.1 Monterey Harbor 2.2* Monterey Harbor 2.3 Monterey Harbor 3.1 Monterey Harbor 3.2* Monterey Harbor 3.3 Monterey Harbor 4.1 Monterey Harbor 4.2* Monterey Harbor 4.3
Temporal Representation:	Samples were collected once a month from August 2006 to October 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at

http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)

QAPP Information Reference(s):

DECISION ID	41157	Region 3
Monterey Harbor		

Pollutant:	**Arsenic**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample exceeded the evaluation guideline applied to protect the commercial beneficial use. Two out of two shellfish tissue samples exceeded the evaluation guideline applied to protect the shellfish harvesting beneficial use. Zero out of six sediment samples exceeded the evaluation guideline. For the commercial and the aquatic life beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3.Two out of two shellfish tissue samples exceed the evaluation guideline applied to protect for the shellfish harvesting beneficial use. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41157, Arsenic	**Region 3**
Monterey Harbor	

LOE ID:	55319
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Arsenic. One composite (18 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in fish tissue is 0.0034 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41157, Arsenic **Region 3**

Monterey Harbor

LOE ID:	55318
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples did exceed

	the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41157, Arsenic **Region 3**

Monterey Harbor

LOE ID:	15755
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Arsenic.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41157, Arsenic **Region 3**

Monterey Harbor

LOE ID:	15754
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42111** **Region 3**

Monterey Harbor

Pollutant:	**Copper**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment. The pollutant concentration in sediment must be associated with toxicity to result in addition of the pollutant to the Section 303(d) list.

Three lines of evidence are available in the administrative record to assess this pollutant. Three of three water samples exceed the evaluation guideline applied to protect for the marine habitat beneficial use. One of six sediment samples exceeded the aquatic life evaluation guideline. For the cold and warm aquatic habitat beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification to place it on the 303(d) list, in accordance with section 2.1 of the Policy. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of three water samples exceed the evaluation guideline set to protect for the marine habitat beneficial uses and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42111, Copper **Region 3**

Monterey Harbor

LOE ID:	15894
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42111, Copper **Region 3**

Monterey Harbor

LOE ID:	15893
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42111, Copper **Region 3**

Monterey Harbor

LOE ID:	55334
Pollutant:	Copper
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	3
Number of Exceedances:	3
Data and Information Type:	Fixed station physical/chemical (conventional plus toxic pollutants)
Data Used to Assess Water Quality:	All of the three samples exceeded the CTR value of 3.1 ug/L for dissolved copper in saltwater.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	California Toxics Rule (CTR) lists criterion continuous concentration of 3.1 ug/L for dissolved copper to protect aquatic life in marine waters.
Guideline Reference:	Code of Federal Regulations 40 part 131.38 Establishment of numeric criteria for priority

toxic pollutants for the State of California. 7/1/2011 Edition

Spatial Representation:	A total of four grab samples were collected from inside the marina basin (Sites 1, 2, 3, & 4), these were averaged per sample event.
Temporal Representation:	Samples were collected on three separate sampling events during the dry season (July - October) in 2006.
Environmental Conditions:	Samples were collected during the dry season only.
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID 49417 Region 3

Monterey Harbor

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. One water quality objective is assessed. Six out of twelve samples exceeded the water quality objective for dissolved oxygen in Marine Habitats. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Six out of twelve samples exceeded the water quality objective for dissolved oxygen. This exceeds the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49417, Oxygen, Dissolved Region 3

Monterey Harbor

LOE ID:	55303
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved

Beneficial Use:	Marine Habitat
Number of Samples:	12
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Numeric data generated from 12 minimum of Dissolved Oxygen concentrations had 6 exceedences.
Data Reference:	Data for Various Pollutants in California Marinas, 2006.
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen content of all surface waters designated as "Warm Freshwater Habitat" must be greater than 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the following stations: Monterey Harbor 1.1 Monterey Harbor 1.2 Monterey Harbor 1.3 Monterey Harbor 2.1 Monterey Harbor 2.2 Monterey Harbor 2.3 Monterey Harbor 3.1 Monterey Harbor 3.2 Monterey Harbor 3.3 Monterey Harbor 4.1 Monterey Harbor 4.2 Monterey Harbor 4.3
Temporal Representation:	Samples were collected once a month from August 2006 to October 2006.
Environmental Conditions:	
QAPP Information:	Samples were collected and analyzed in accordance with a Quality Assurance Project Plan that was prepared per State Water Resources Control Board Agreement No. 05-218-250 California Department of Pesticide Regulation, Sacramento, CA. (Available online at http://www.cdpr.ca.gov/docs/emon/surfwtr/protocols/qapp_study236.pdf)
QAPP Information Reference(s):	

DECISION ID	**49419**	**Region 3**
Monterey Harbor		

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines for cold and warm freshwater habitat, however the single fish tissue sample exceeded the evaluation guideline for the commercial beneficial use. For the cold and warm beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of two shellfish tissue samples exceeded the evaluation guideline and the single fish tissue sample exceeded the evaluation guideline applied to protect the commercial beneficial use. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49419, PCBs (Polychlorinated biphenyls) **Region 3**

Monterey Harbor

LOE ID:	55309
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: The two samples exceeded the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs,

	Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 309MTRY24 and 310MTRY28. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49419, PCBs (Polychlorinated biphenyls) Region 3

Monterey Harbor

LOE ID:	55315
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 49419, PCBs (Polychlorinated biphenyls) **Region 3**

Monterey Harbor

LOE ID:	55316
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PCB, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49419, PCBs (Polychlorinated biphenyls) **Region 3**

Monterey Harbor

LOE ID:	55314
Pollutant:	PCBs (Polychlorinated biphenyls)

LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (18 fish per composite) was generated from one species: speckled sanddab. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 1 monitoring site [Monterey Harbor random site 12 - 309MTRY12]. Samples were collected from 2 locations.
Temporal Representation:	Data was collected on a single day 6/24/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42195**	**Region 3**
Monterey Harbor		

Pollutant:	**Toxicity**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not Delist from 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.6 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess this pollutant in sediment samples. A place holder LOE (#3965) is included in this assessment. Monterey Harbor was originally listed for "Unknown Toxicity" based on sediment toxicity data summarized in the Consolidated Toxic Hot Spots Clean Up Plan (SWRCB, April 1999). This report states that multiple sediment toxicity hits (associated with elevated chemistry results) were reported from two sample events. However, toxicity was also seen at "reference" sites outside the Harbor Mouth. The reports also stated that this finding confounds the interpretation of toxicity data found within the Harbor. Because the original listing was based on sediment toxicity data, the pollutant has been changed from "Unknown Toxicity" to "Sediment Toxicity".

Two additional LOEs summarize sediment toxicity data collected at 6 sites within the Harbor in 2004. None of the 6 of the samples were toxic to invertebrate test organisms (exhibit a significant increase in mortality compared to the laboratory control) and therefore do not exceed the narrative water quality objective for toxicity, set to protect for aquatic life beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported and a minimum of two exceedances is needed to determine if beneficial uses are not supported using table 3.1. Therefore, the use support rating is set to 'insufficient information'.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.The original listing was based on multiple sediment toxicity hits and associated sediment chemistry data showing PAH's, copper and zinc levels exceeding available criteria.
4. None of the 6 of the samples were toxic to invertebrate test organisms However, a minimum of 28 samples are required to determine if a water segment-pollutant combination can be removed from the Section 303(d) list.
5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42195, Toxicity **Region 3**

Monterey Harbor

LOE ID:	23884
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are

	met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42195, Toxicity **Region 3**

Monterey Harbor

LOE ID:	23883
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42195, Toxicity **Region 3**

Monterey Harbor

LOE ID:	3965
Pollutant:	Unknown Toxicity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Marine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID	41112	Region 3
Monterey Harbor		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41112, Anthracene	**Region 3**
Monterey Harbor	

LOE ID:	15669
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41112, Anthracene **Region 3**

Monterey Harbor

LOE ID:	15670
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [

	309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 42141 Region 3

Monterey Harbor

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42141, Benzo(a)anthracene Region 3

Monterey Harbor

LOE ID:	15810
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42141, Benzo(a)anthracene **Region 3**

Monterey Harbor

LOE ID:	15811
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41099**	**Region 3**
Monterey Harbor		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not

changed.

Line of Evidence (LOE) for Decision ID 41099, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Monterey Harbor

LOE ID:	15436
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41099, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Monterey Harbor

LOE ID:	15437
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41107**	**Region 3**
Monterey Harbor		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 18 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 18 samples exceed the Evaluation Guideline (North Carolina Administrative code, Title 15A) and the General Water Quality Objective set to protect aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 26 samples is needed to determine if a beneficial use is fully supported using Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41107, Chlorophyll-a **Region 3**

Monterey Harbor

LOE ID:	16197
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 -

	Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41107, Chlorophyll-a **Region 3**

Monterey Harbor

LOE ID:	16198
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 18 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.

QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41888** **Region 3**

Monterey Harbor

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41888, Chromium **Region 3**

Monterey Harbor

LOE ID:	15979
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41888, Chromium **Region 3**

Monterey Harbor

LOE ID:	15992
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)

Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42110**	**Region 3**
Monterey Harbor		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42110, Chrysene (C1-C4)	**Region 3**
Monterey Harbor	

LOE ID:	16076
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42110, Chrysene (C1-C4) **Region 3**

Monterey Harbor

LOE ID:	16077
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42173**	**Region 3**
Monterey Harbor		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. One of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples

	is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42173, Fluoranthene **Region 3**

Monterey Harbor

LOE ID:	16519
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42173, Fluoranthene **Region 3**

Monterey Harbor

LOE ID:	16518

Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41015** **Region 3**

Monterey Harbor

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of the 6

samples exceed the Evaluation Guideline as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of the 6 samples exceed the Evaluation Guideline as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41015, Fluorene **Region 3**

Monterey Harbor

LOE ID:	16384
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey

	Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41015, Fluorene **Region 3**

Monterey Harbor

LOE ID:	16383
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41023** **Region 3**

Monterey Harbor

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41023, Lead — Region 3

Monterey Harbor

LOE ID:	17230
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41023, Lead **Region 3**

Monterey Harbor

LOE ID:	17231
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 -

	Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 41068 Region 3

Monterey Harbor

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41068, Naphthalene Region 3

Monterey Harbor

LOE ID:	17130
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41068, Naphthalene **Region 3**

Monterey Harbor

LOE ID:	17369
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41069**	**Region 3**
Monterey Harbor		

Pollutant:	**Nickel**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data were assessed. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6, two lines of evidence are necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision	This is a decision previously approved by the State Water Resources Control Board and the USEPA.

Recommendation: No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41069, Nickel **Region 3**

Monterey Harbor

LOE ID:	16951
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41069, Nickel **Region 3**

Monterey Harbor

LOE ID:	16950
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None

Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41038**	**Region 3**
Monterey Harbor		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list

in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41038, Phenanthrene **Region 3**

Monterey Harbor

LOE ID:	17037
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in

	submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41038, Phenanthrene **Region 3**

Monterey Harbor

LOE ID:	17050
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **41082** **Region 3**

Monterey Harbor

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41082, Pyrene **Region 3**

Monterey Harbor

LOE ID:	16915
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)

Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41082, Pyrene **Region 3**

Monterey Harbor

LOE ID:	16914
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Monterey Harbor to determine beneficial use support and results are as follows: 1 of 6 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Monterey Harbor was collected at 6 monitoring sites [309MTRY08 - Monterey Harbor, 309MTRY28 - Monterey Harbor, 309MTRY12 - Monterey Harbor, 309MTRY24 - Monterey Harbor, 309MTRY16 - Monterey Harbor, 309MTRY20 - Monterey Harbor]
Temporal Representation:	Data was collected on a single day 6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.

QAPP Information Reference(s):

Draft California 2014 Integrated Report (303(d) List/305(b) Report)

Supporting Information

Regional Board 3 - Central Coast Region

Water Body Name: **Moss Landing Harbor**
Water Body ID: **CAB306000141998121412113 5**
Water Body Type: **Bay & Harbor**

DECISION ID **34527** **Region 3**
Moss Landing Harbor

Pollutant: **Pesticides**
Final Listing Decision: **Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2012)
Revision Status Revised
Reason for Delisting: Change from general pollutant to specific pollutant listing (e.g. metals to copper)
Impairment from Pollutant or Pollution: Pollutant

Regional Board Staff Conclusion: This pollutant is being considered for removal from the CWA section 303(d) List under section 4 of the Listing Policy. This section of the Listing Policy calls for removing waters from the List if the decision is found to be based faulty data and it is demonstrated that the listing would not have occurred in the absence of such faulty data. One line of evidence (LOE) is available in the administrative record to assess this pollutant but no data or information is associated with that LOE. The data cannot be found that was used in the initial assessment of this water segment-pollutant combination.

Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification for this water segment-pollutant combination to be on the List. Furthermore, newer data for individual pollutants are available and will be assessed under individual decisions. Those decisions will replace this decision for the generic pollutant category Pesticides.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be removed from the section 303(d) list because this decision is not supported by data and there are data assessed for several different pesticides for this water segment.

Line of Evidence (LOE) for Decision ID 34527, Pesticides **Region 3**
Moss Landing Harbor

LOE ID: 3969

Pollutant: Pesticides
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

Beneficial Use: Estuarine Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference: Placeholder reference pre-2006 303(d)

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID **41070** **Region 3**

Moss Landing Harbor

Pollutant:	**Oxygen, Dissolved**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2018
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Two water quality objectives are assessed. Forty-one of the 164 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and in Marine Habitats. Seven of the 164 samples also exceeded the water quality objective for dissolved oxygen in Warm Freshwater Habitats. The Basin Plan general water quality objective for oxygen saturation states that the median value shall not fall below 85% saturation. However, the oxygen saturation objective is only applied Â“for waters not mentioned by a specific beneficial useÂ…Â” and this water body is designated for both Cold and Warm Freshwater Habitats and also Marine Habitats. Therefore, the use support rating for oxygen saturation is set at Insufficient Information. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Forty-one of the 164 samples exceeded the water quality objective for dissolved oxygen in Cold Freshwater Habitats and in Marine Habitats and this exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved **Region 3**

Moss Landing Harbor

LOE ID:	15325
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	157
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 6 of 157 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved **Region 3**

Moss Landing Harbor

LOE ID:	15064
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	97

Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 30 of 97 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved **Region 3**

Moss Landing Harbor

LOE ID:	15065
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	97
Number of Exceedances:	30
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 30 of 97 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: Median values should not fall below 85% saturation as a result of controllable water quality conditions.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 11/18/1996-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved **Region 3**

Moss Landing Harbor

LOE ID:	15309
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	157
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 39 of 157 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, Cold Water Habitat Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [

	306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved **Region 3**

Moss Landing Harbor

LOE ID:	15310
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	157
Number of Exceedances:	39
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 39 of 157 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a states the following: Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of limits listed in Table 3-6 (page III-12). Table 3-6 states that the Marine Habitat Objective for dissolved oxygen states that the concentration shall not be reduced below 7.0 mg/l at any time.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved **Region 3**

Moss Landing Harbor

LOE ID:	52912
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 5.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved **Region 3**

Moss Landing Harbor

LOE ID:	52888
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009

SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved **Region 3**

Moss Landing Harbor

LOE ID:	52872
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 2 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved — Region 3

Moss Landing Harbor

LOE ID:	52862
Pollutant:	Dissolved oxygen saturation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Oxygen, Saturation.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Median values should not fall below 85% saturation as a result of controllable water quality conditions (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41070, Oxygen, Dissolved — Region 3

Moss Landing Harbor

LOE ID:	79238
Pollutant:	Oxygen, Dissolved
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Dissolved
Beneficial Use:	Marine Habitat
Number of Samples:	7
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as

	follows: 2 of 7 samples exceed the criterion for Oxygen, Dissolved.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The dissolved oxygen concentration shall not be reduced below 7.0 mg/l at any time (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

DECISION ID	**41130**	**Region 3**
Moss Landing Harbor		

Pollutant:	**pH**
Final Listing Decision:	**Do Not Delist from 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the CWA section 303(d) List under section 4.2 of the Listing Policy. Under this section a single line of evidence is necessary to assess listing status. Ten lines of evidence are available in the administrative record to assess this pollutant. Five beneficial uses are assessed. Thirty-three of the 170 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and Marine Habitats, and 54 of the 170 samples exceed the water quality objectives for Drinking Water and Recreation. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Thirty-three of the 170 samples exceed the water quality objectives for Cold and Warm Freshwater Habitats and Marine Habitats, and 54 of the 170 samples exceed the water quality objectives for Drinking Water and Recreation. Each of these exceeds the allowable frequency listed in Table 4.2 of the Listing Policy. 4. Pursuant to section 4.11 of the Listing Policy, no additional data and information are available indicating that standards are met.
Regional Board Staff Decision	After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	79239
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	52957
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	52949
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data

	were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	52942
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	7
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 3 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall neither be depressed below 6.5 nor raised above 8.3 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	52913
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for pH.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The pH value shall not be depressed below 7.0 or raised above 8.5 (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	15175
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	163
Number of Exceedances:	51
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 51 of 163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for water contact recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	

Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	15159
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	163
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 33 of 163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	15176
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	163
Number of Exceedances:	51
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 51 of 163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin objective for non-contact water recreation uses (Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a) states the following: pH value shall neither be depressed below 6.5 nor raised above 8.3.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	15177
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	163
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve

	Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 33 of 163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan, Central Coast Basin, General Objective, Chapter III, Section II.A.2 General Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries states the following: For waters not mentioned by a specific beneficial use, the pH value shall not be depressed below 7.0 or raised above 8.5.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41130, pH **Region 3**

Moss Landing Harbor

LOE ID:	15174
Pollutant:	pH
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Marine Habitat
Aquatic Life Use:	Marine Habitat
Number of Samples:	163
Number of Exceedances:	33
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 33 of 163 samples exceed the criterion for pH.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	The Water Quality Control Plan, Central Coast Basin, Section II.A.2. Objectives for All Inland Surface Waters, Enclosed Bays, and Estuaries, II.A.2.a states the following for Marine Habitat beneficial uses: The pH value shall not be depressed below 7.0 or raised

	above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	41075	Region 3
Moss Landing Harbor		

Pollutant:	**Chlorpyrifos**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Eighteen of the eighteen water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses. Zero of the two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline. For the tissue samples, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Eighteen of the eighteen water samples exceed the evaluation guideline (Siepmann and Finlayson 2000, with minor corrections to significant figures as described in Beaulaurier et al., 2005) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. Zero of three tissue samples exceeded the evaluation guideline.

4. The Lower Salinas River Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41075, Chlorpyrifos **Region 3**

Moss Landing Harbor

LOE ID:	55463
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41075, Chlorpyrifos **Region 3**

Moss Landing Harbor

LOE ID:	55337
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlorpyrifos. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for chlorpyrifos in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41075, Chlorpyrifos **Region 3**

Moss Landing Harbor

LOE ID:	13996
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 18 of 18 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor at Sandholt Rd]
Temporal Representation:	Data was collected over the time period 7/9/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41075, Chlorpyrifos **Region 3**

Moss Landing Harbor

LOE ID:	13995
Pollutant:	Chlorpyrifos
LOE Subgroup:	Pollutant-Water
Matrix:	Water

Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	18
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 18 of 18 samples exceed the criterion for Chlorpyrifos.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.025 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor at Sandholt Rd]
Temporal Representation:	Data was collected over the time period 7/9/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**41028**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Diazinon**
Final Listing Decision:	**Do Not Delist from 303(d) list (being addressed with USEPA approved TMDL)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Agriculture
TMDL Name:	Lower Salinas River Chlorpyrifos and Diazinon TMDL
TMDL Project Code:	133
Date TMDL Approved by USEPA:	10/07/2011
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for removal from the section 303(d) list under section 4.1 of the Listing Policy. Under 4.1 of the Policy, a minimum of one line of evidence is needed to assess listing status.

Four lines of evidence are available in the administrative record to assess this pollutant. Three of eighteen samples exceeded the evaluation guideline (Finlayson, 2004). Zero of one fish tissue samples exceed the evaluation guideline. Zero of two shellfish tissue samples exceed the evaluation guideline. For the commercial and shellfish beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the CWA section 303(d) List. In accordance with section 2.2 of the Policy, there is sufficient justification to place it in the Being Addressed portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Three of eighteen samples exceed the evaluation guideline (Finlayson, 2004) set to protect for aquatic life beneficial uses and these exceed the allowable frequency listed in Table 4.1 of the Listing Policy. No tissue samples exceeded the evaluation guideline.

4. The Lower Salinas River Watershed Chlorpyrifos and Diazinon TMDL has been approved by the USEPA on October 7, 2011.

5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:

After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be removed from the section 303(d) list because applicable water quality standards for the pollutant are being exceeded.

Furthermore, this pollutant waterbody combination should be placed in the 'Being Addressed' portion of the 303(d) list because a TMDL has been completed and approved by RWQCB and USEPA, and is expected to result in attainment of the standard.

Line of Evidence (LOE) for Decision ID 41028, Diazinon **Region 3**

Moss Landing Harbor

LOE ID:	13906
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 3 of 18 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor at Sandholt Rd]
Temporal Representation:	Data was collected over the time period 7/9/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41028, Diazinon **Region 3**

Moss Landing Harbor

LOE ID:	13907
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	18
Number of Exceedances:	3
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 3 of 18 samples exceed the criterion for Diazinon.
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	One hour average maximum concentration 0.16 ug/L as stated in Sipmann and Finlayson (2000).
Guideline Reference:	Water quality criteria for diazinon and chlorpyrifos. Administrative Report 00-3. Rancho

	Cordova, CA: Pesticide Investigations Unit, Office of Spills and Response. CA Department of Fish and Game
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor at Sandholt Rd]
Temporal Representation:	Data was collected over the time period 7/9/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41028, Diazinon **Region 3**

Moss Landing Harbor

LOE ID:	55339
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Diazinon. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in fish tissue is 1,500 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41028, Diazinon **Region 3**

Moss Landing Harbor

LOE ID:	55338
Pollutant:	Diazinon
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for diazinon in shellfish tissue is 2,300 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49589	Region 3
Moss Landing Harbor		

Pollutant:	**Aldrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49589, Aldrin	**Region 3**
Moss Landing Harbor	

LOE ID:	55430
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (39 fish per composite) was generated from one species:

	speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49589, Aldrin **Region 3**

Moss Landing Harbor

LOE ID:	55429
Pollutant:	Aldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Aldrin. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin

Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Aldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42080**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Cadmium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of one fish tissue samples exceeded the evaluation guideline. Zero out of two shellfish tissue samples exceeded the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three tissue samples and zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42080, Cadmium — Region 3

Moss Landing Harbor

LOE ID:	15409
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42080, Cadmium — Region 3

Moss Landing Harbor

LOE ID:	15410
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Cadmium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cadmium is 4.98 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42080, Cadmium **Region 3**

Moss Landing Harbor

LOE ID:	55451
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Cadmium. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in fish tissue is 2.2 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42080, Cadmium **Region 3**

Moss Landing Harbor

LOE ID:	55441
Pollutant:	Cadmium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for cadmium in shellfish tissue is 3.3 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008;

	USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49598	Region 3
Moss Landing Harbor		

Pollutant:	**Chlordane**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of one fish tissue samples exceeded the evaluation guideline. One out of two shellfish tissue samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One out of three tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the

applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49598, Chlordane **Region 3**

Moss Landing Harbor

LOE ID:	55461
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49598, Chlordane **Region 3**

Moss Landing Harbor

LOE ID:	55462
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue

Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in fish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49598, Chlordane **Region 3**

Moss Landing Harbor

LOE ID:	55453
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Chlordane, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total Chlordane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49598, Chlordane **Region 3**

Moss Landing Harbor

LOE ID:	55452
Pollutant:	Chlordane
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: One of the two samples did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total chlordane was calculated as the sum of the following chlordane isomers: cis- and trans-chlordane, cis- and trans-nonachlor, and oxychlordane.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total chlordane in shellfish tissue is 6.0 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41133	Region 3
Moss Landing Harbor		

Pollutant:	**Chlorophyll-a**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Eight lines of evidence are available in the administrative record to assess this pollutant. One of the 68 samples exceed the evaluation guideline (North Carolina Administrative code, Title 15A) used to interpret the narrative water quality objective for bio-stimulation risk and aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 68 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 41133, Chlorophyll-a **Region 3**

Moss Landing Harbor

LOE ID:	52818
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41133, Chlorophyll-a **Region 3**

Moss Landing Harbor

LOE ID:	52825
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	14
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 14 samples exceed the criterion for Chlorophyll a (lab).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 6/3/2008-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41133, Chlorophyll-a **Region 3**

Moss Landing Harbor

LOE ID:	52811
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat

Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41133, Chlorophyll-a **Region 3**

Moss Landing Harbor

LOE ID:	52926
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Chlorophyll a.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water

	Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41133, Chlorophyll-a **Region 3**

Moss Landing Harbor

LOE ID:	15206
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41133, Chlorophyll-a **Region 3**

Moss Landing Harbor

LOE ID:	16180
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards

	Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41133, Chlorophyll-a **Region 3**

Moss Landing Harbor

LOE ID:	15191
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	31
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 31 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North

	Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 7/31/2001-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41133, Chlorophyll-a **Region 3**

Moss Landing Harbor

LOE ID:	16167
Pollutant:	Chlorophyll-a
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 16 samples exceed the criterion for Chlorophyll a.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (general objective for biostimulatory substances, Water Quality Control Plan, Central Coast Basin, Chapter III, Section II).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3) North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards Water quality standards table
Evaluation Guideline:	North Carolina Administrative code (NCAC), Title 15A - Environmental and Natural Resources, Subchapter 2B-Surface water and wetland standards, Rule 0211-Fresh surface water quality standards for class C waters (Class C is defined as freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife).Â Section 3(a) of Rule 0211 applies to all fresh surface waters and states that

	chlorophyll a is not to exceed 40 ug/L.
Guideline Reference:	North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards North Carolina standards, criteria, or toxic concentrations. Adopted per title 15A North Carolina Administrative Code subchapter 2B - Surface water and wetland standards
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**49693**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Endosulfan**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline when applied to cold or warm freshwater habitat, or the commercial beneficial use. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49693, Endosulfan — Region 3

Moss Landing Harbor

LOE ID:	55353
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan. One composite (39 fish per composite) was generated from one species: speckled sanddab. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in fish tissue is 13,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49693, Endosulfan — Region 3

Moss Landing Harbor

LOE ID:	55347

Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endosulfan (I and II) in shellfish tissue is 20,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49693, Endosulfan **Region 3**

Moss Landing Harbor

LOE ID:	55351
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan I. One composite (39 fish per composite) was generated from one species: speckled sanddab. Endosulfan was calculated as the sum of Endosulfan I and Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49693, Endosulfan **Region 3**

Moss Landing Harbor

LOE ID:	55352
Pollutant:	Endosulfan
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endosulfan. One composite (39 fish per composite) was generated from one species: speckled sanddab. Endosulfan was calculated as the sum of Endosulfan I and

	Endosulfan II. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endosulfan, Total concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	42095	Region 3
Moss Landing Harbor		

Pollutant:	**Endrin**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline applied to protect cold and warm habitat and the commercial beneficial use. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline and no sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42095, Endrin **Region 3**

Moss Landing Harbor

LOE ID:	55354
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in shellfish tissue is 1,000 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis

Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42095, Endrin **Region 3**

Moss Landing Harbor

LOE ID:	55359
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42095, Endrin — Region 3

Moss Landing Harbor

LOE ID:	55360
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Endrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42095, Endrin — Region 3

Moss Landing Harbor

LOE ID:	55361
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms

Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Endrin. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for endrin in fish tissue is 660 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42095, Endrin **Region 3**

Moss Landing Harbor

LOE ID:	16558
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as

	follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42095, Endrin **Region 3**

Moss Landing Harbor

LOE ID:	16557
Pollutant:	Endrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Endrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for endrin is 207 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for

	polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**49706**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Heptachlor**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The single fish tissue sample did not exceed the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49706, Heptachlor	**Region 3**
Moss Landing Harbor	

LOE ID:	55362

Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49706, Heptachlor **Region 3**

Moss Landing Harbor

LOE ID:	55370
Pollutant:	Heptachlor
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis

Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49709**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Heptachlor epoxide**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. The single fish tissue sample did not exceed the evaluation guideline applied to protect the cold and warm habitat and the commercial beneficial uses. The two shellfish samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. No tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49709, Heptachlor epoxide **Region 3**

Moss Landing Harbor

LOE ID:	55372
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49709, Heptachlor epoxide **Region 3**

Moss Landing Harbor

LOE ID:	55371
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in shellfish tissue is 1.4 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

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Line of Evidence (LOE) for Decision ID 49709, Heptachlor epoxide **Region 3**

Moss Landing Harbor

LOE ID:	55382
Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for heptachlor epoxide in fish tissue is 0.93 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1999)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Public Health Goal for Heptachlor and Heptachlor Epoxide in Drinking Water
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49709, Heptachlor epoxide **Region 3**

Moss Landing Harbor

LOE ID:	55373

Pollutant:	Heptachlor epoxide
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Heptachlor epoxide. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Heptachlor Epoxide concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49711**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Hexachlorobenzene/ HCB**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not

exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49711, Hexachlorobenzene/ HCB **Region 3**

Moss Landing Harbor

LOE ID:	55383
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in shellfish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a

	carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49711, Hexachlorobenzene/ HCB **Region 3**

Moss Landing Harbor

LOE ID:	55384
Pollutant:	Hexachlorobenzene/ HCB
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Hexachlorobenzene. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for hexachlorobenzene in fish tissue is 2.8 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs,

	Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49712	Region 3
Moss Landing Harbor		

Pollutant:	**Lindane/gamma Hexachlorocyclohexane (gamma-HCH)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guidelines applied to protect the cold and warm habitat and commercial beneficial uses. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49712, Lindane/gamma Hexachlorocyclohexane (gamma-HCH)	Region 3

Moss Landing Harbor

LOE ID:	55393
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49712, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Moss Landing Harbor

LOE ID:	55392
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in shellfish tissue is 7.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2005)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49712, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Moss Landing Harbor

LOE ID:	55395
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for lindane in fish tissue is 4.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets.
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49712, Lindane/gamma Hexachlorocyclohexane (gamma-HCH) **Region 3**

Moss Landing Harbor

LOE ID:	55394
Pollutant:	Lindane/gamma Hexachlorocyclohexane (gamma-HCH)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for HCH, gamma. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and

	homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Lindane concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**42232**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Mercury**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three tissue samples exceeded the evaluation guideline and zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 42232, Mercury **Region 3**

Moss Landing Harbor

LOE ID:	55400
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Mercury. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in fish tissue of trophic level 4 fish (150 - 500 mm; fillet wet weight) is 0.20 mg/kg. This is assuming a 32 g/day consumption rate (USEPA, 2001).
Guideline Reference:	Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42232, Mercury **Region 3**

Moss Landing Harbor

LOE ID:	55399
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The USEPA 304(a) recommended water quality criterion for concentrations of methylmercury in shellfish tissue (wet weight) with a consumption rate of 21 g/day is 0.20 ppm. (Brodberg, R.K., and G.A. Pollock, 1999; USEPA, 2001)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Water Quality Criterion for the Protection of Human Health: Methylmercury. Final. United States Environmental Protection Agency Office of Science and Technology Office of Water. EPA-823-R-01-001. January 2001
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42232, Mercury **Region 3**

Moss Landing Harbor

LOE ID:	17188

Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 5 of 6 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42232, Mercury **Region 3**

Moss Landing Harbor

LOE ID:	17187
Pollutant:	Mercury
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as

	follows: 5 of 6 samples exceed the criterion for Mercury.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for mercury is 1.06 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**49718**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Mirex**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero of zero fish tissue samples exceeded the evaluation guideline and zero of zero shellfish tissue samples exceeded the evaluation guideline. The samples counts are zero out of zero because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero of zero tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49718, Mirex **Region 3**

Moss Landing Harbor

LOE ID:	55402
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Mirex. One composite (39 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in fish tissue is 0.28 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient

	Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49718, Mirex **Region 3**

Moss Landing Harbor

LOE ID:	55401
Pollutant:	Mirex
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: Zero of 0 samples exceeded the guideline. Each sample consisted of 45 California mussels. The two samples were not used in the assessment because the laboratory data reporting limit was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing Policy.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for mirex in shellfish tissue is 0.43 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 1992)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens.
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	52525	Region 3
Moss Landing Harbor		

Pollutant:	**Nitrate**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant

Regional Board Staff Conclusion:

This pollutant is being considered for placement on the CWA section 303(d) List under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. The primary evidence supporting this listing at this point in time is modeled data, therefore there is insufficient evidence that the Cold Freshwater Habitat beneficial use is impaired.

Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 6 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Four of the 6 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat.

The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. The following is a summary of the supporting evidence:

1) Using site-specific data from this waterbody, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted a benthic algal contribution to oxygen deficit for this water body of 5.57 mg/L. This exceeds the screening threshold for benthic algal contribution to oxygen deficit of 1.25 mg/L (R3 NNE Technical Report, 2010).
2) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13, QUAL2K model (Tetratech, 2007) predicted algae biomass of 115 g/m2 AFDW. This exceeds the Cold Freshwater Habitat screening threshold for algae biomass of 60 grams/m2 (Creager, et al., 2006).
3) Using site-specific data from this waterbody and the Revised Qual2K model, the California Benthic Biomass Predictor Tool, v. 13 (Tetratech, 2007) predicted benthic chlorophyll a concentrations of 289 mg/m2. This exceeds the Cold Freshwater Habitat screening threshold of 150 mg/m2 (Creager, et al., 2006).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section 303(d) List in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3.Four lines of evidence are available in the administrative record to assess this pollutant. Four of the 6 nitrate samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. Four of the 6 nitrate/nitrite samples exceed the water quality objectives for Cold and Warm Freshwater Habitat. These exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
4. The Central Coast Region requires supporting evidence of eutrophication to support a nitrate listing at 1.0 mg/L for Cold and Warm Freshwater Habitat. The primary evidence supporting this listing at this point in time is modeled data, therefore there is insufficient evidence that the Cold Freshwater Habitat beneficial use is impaired.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision

After review of the available data and information, RWQCB staff concludes that the water body-

Recommendation: pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 52525, Nitrate **Region 3**

Moss Landing Harbor

LOE ID:	52836
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/11/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 52525, Nitrate **Region 3**

Moss Landing Harbor

LOE ID:	52847
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 4 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 52525, Nitrate **Region 3**

Moss Landing Harbor

LOE ID:	52855
Pollutant:	Nitrate
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None

Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 4 of 6 samples exceed the criterion for Nitrate as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-6/11/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 52525, Nitrate **Region 3**

Moss Landing Harbor

LOE ID:	52881
Pollutant:	Nitrate/Nitrite (Nitrite + Nitrate as N)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	26
Number of Exceedances:	4
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as

	follows: 4 of 26 samples exceed the criterion for Nitrate/Nitrite as N.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Technical approach to develop nutrient numeric endpoints for California, Tetra Tech, June 2006. The Central Coast Region numeric target for maximum nitrate concentration is based on the Tetra Tech NNE (Nutrient Numeric Endpoint) Model and CCAMP data for 193 sites, monitored monthly for at least 1 year between January 1998 and December 2006. The model numeric target for aquatic life habitats in the Central Coast Region is 1.0 mg/L Nitrate as N.
Guideline Reference:	Staff Report Division of Water Quality Nutrient Screening Tools for Use in the Clean Water Act Section 303(d) Listing Process Technical Approach to Develop Nutrient Numeric Endpoints for California. U.S. EPA Region IX. State Water Resources Control Board. 68-C-02-108-To-111 Central Coast RegionTechnical Paper: Interpreting Narrative Objectives for Biostimulatory Substances for California Central Coast Waters. This method uses the Technical Approach for Developing California Nutrient Numeric Endpoints.
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 3/5/2007-7/7/2009.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

DECISION ID	**49737**	**Region 3**
Moss Landing Harbor		

Pollutant:	**PAHs (Polycyclic Aromatic Hydrocarbons)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample does not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Zero out of three tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49737, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Moss Landing Harbor

LOE ID:	55410
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PAH, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in fish tissue is 0.7 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1:

	Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49737, PAHs (Polycyclic Aromatic Hydrocarbons) Region 3

Moss Landing Harbor

LOE ID:	55409
Pollutant:	PAHs (Polycyclic Aromatic Hydrocarbons)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. PAH, Total is calculated as a potency weighted concentration with respect to benzo(a)pyrene and was calculated based on the following analytes: Dibenz(a,h)anthracene, Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-c,d)pyrene, Anthracene, Benzo(g,h,i)perylene, Chrysene, Acenaphthene, Acenaphthylene, Fluoranthene, Fluorene, Phenanthrene, and Pyrene.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polycyclic aromatic hydrocarbons in shellfish tissue is 1.1 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene

	Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**49744**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Selenium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue sample did not exceed the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of three tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49744, Selenium	**Region 3**
Moss Landing Harbor	

LOE ID:	55422
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for selenium in shellfish tissue is 11 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. A background dietary consuption rate of 0.114 mg/day is applied for this micronutrient. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49744, Selenium **Region 3**

Moss Landing Harbor

LOE ID:	55423
Pollutant:	Selenium
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Selenium. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The OEHHA Fish Contaminant Goal for selenium in fish tissue is 7.4 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. A background dietary consumption rate of 0.114 mg/day is applied for this micronutrient. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**40987**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Temperature, water**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the CWA section 303(d) List under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Six of the 180 samples exceed the evaluation guideline (Moyle, 1976) used to interpret the water quality objective for water temperature. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the CWA section

303(d) List.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of the 180 samples exceed the evaluation guideline and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

Line of Evidence (LOE) for Decision ID 40987, Temperature, water **Region 3**

Moss Landing Harbor

LOE ID:	52934
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 7 samples exceed the criterion for Water Temperature.
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The optimum range for growth and completion of most life stages of rainbow trout is 13-21 degrees Celsius (Moyle 1976).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 40987, Temperature, water **Region 3**

Moss Landing Harbor

LOE ID:	15243
Pollutant:	Temperature, water
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	173
Number of Exceedances:	6
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 6 of 173 samples exceed the criterion for Water Temperature.
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses (General Objective in Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Inland Fishes of California (Moyle 1976) states that for rainbow trout the optimum range for growth and completion of most life stages is 13-21 degrees C (page 129).
Guideline Reference:	Inland Fishes of California
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

DECISION ID	**49747**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Toxaphene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 of the

Conclusion:	Listing Policy. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One out of one shellfish tissue samples exceeded the evaluation guideline. One sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. The single fish tissue sample did not exceed the evaluation guideline applied to protect the cold and warm habitat beneficial uses. The single fish tissue sample was not used to assess an exceedance of the evaluation guideline set to protect for the commercial beneficial use because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49747, Toxaphene **Region 3**

Moss Landing Harbor

LOE ID:	55442
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: One sample exceeded the guideline. Each sample consisted of 45 California mussels. One sample was not used in the assessment because the laboratory data reporting limit was above the objective and therefore the result could not be quantified with the level of certainty required by the Listing Policy. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.

Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in shellfish tissue is 6.5 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49747, Toxaphene **Region 3**

Moss Landing Harbor

LOE ID:	55444
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxaphene. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or

	combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49747, Toxaphene **Region 3**

Moss Landing Harbor

LOE ID:	55443
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Toxaphene. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Toxaphene concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [

	Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49747, Toxaphene **Region 3**

Moss Landing Harbor

LOE ID:	55454
Pollutant:	Toxaphene
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Toxaphene. One composite (39 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for toxaphene in fish tissue is 4.3 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.

QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	49752	Region 3
Moss Landing Harbor		

Pollutant:	**Tributyltin TBT (Tributylstanne)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of two shellfish tissue samples exceeded the evaluation guideline. The single fish sample will not be used in this decision because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of two tissue samples exceeded the evaluation guideline. This does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list. The readily available data and information is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating.

Line of Evidence (LOE) for Decision ID 49752, Tributyltin TBT (Tributylstanne)	Region 3
Moss Landing Harbor	

LOE ID:	55455
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting

Number of Samples:	2
Number of Exceedances:	0
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did not exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in shellfish tissue is 1 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49752, Tributyltin TBT (Tributylstanne) **Region 3**

Moss Landing Harbor

LOE ID:	55456
Pollutant:	Tributyltin TBT (Tributylstanne)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to

	determine beneficial use support and results are as follows: 0 of 0 samples exceed the criterion for Tributyltin as Sn. One composite (39 fish per composite) was generated from one species: speckled sanddab. One sample was not used in the assessment because the laboratory data reporting limit(s) was above the objective and therefore the results could not be quantified with the level of certainty required by the Listing policy. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for tributyltin in fish tissue is 0.66 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day. (Klasing, S., and R. Brodberg, 2008; USEPA, 2000)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Guidance for Assessing Chemical Contaminant Data for Use In Fish Advisories Volume 1: Fish Sampling and Analysis
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	**41034**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Turbidity**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 2.1 and 3.2 of the Listing Policy. Four lines of evidence are available in the administrative record to assess this pollutant. However, the evaluation guidelines are for freshwater habitat and therefore does not apply to Moss Landing Harbor, which is saltwater habitat. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. This Evaluation Guideline is for freshwater habitat and therefore does not apply to Moss Landing Harbor, which is saltwater habitat.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because Evaluation Guideline is for freshwater habitat and therefore does not apply to Moss Landing Harbor, which is saltwater habitat.

Line of Evidence (LOE) for Decision ID 41034, Turbidity **Region 3**

Moss Landing Harbor

LOE ID:	52972
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 40 NTU or greater can cause a reduction in piscivorous fish (largemouth bass) growth due to interference with their ability to find food (Shoup, D.E. and Wahl D.H., 2009).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41034, Turbidity **Region 3**

Moss Landing Harbor

LOE ID:	79240
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water

Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	7
Number of Exceedances:	1
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Water Board Central Coast Water Board Staff assessed public submissions data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 7 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Data from Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program, Jan. 2007-Jul. 2009
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses (Basin Plan).
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	Turbidities of 25 NTU or greater can cause a reduction in juvenile steelhead trout growth due to interference with their ability to find food (Sigler et al. 1984).
Guideline Reference:	The Effects of Turbidity on Prey Selection by Piscivorous Largemouth Bass
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MSLSKL - Moss Landing Harbor at Skipper's Landing]
Temporal Representation:	Data was collected over the time period 1/8/2007-7/10/2007.
Environmental Conditions:	Central Coast Water Board Staff are not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Data was collected following the Quality Assurance Project Plan for Elkhorn Slough National Estuarine Research Reserve's Volunteer Monthly Water Quality Program. Replicate data were identified in data and were qualified by RB Central Coast Water Board S
QAPP Information Reference(s):	Quality Assurance Project Plan, Elkhorn Slough National Estuarine Research Reserve Volunteer Monthly Water Quality Program. May 15, 2009, Ver.1.3

Line of Evidence (LOE) for Decision ID 41034, Turbidity **Region 3**

Moss Landing Harbor

LOE ID:	15294
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	166
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 32 of 166 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water

	Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41034, Turbidity **Region 3**

Moss Landing Harbor

LOE ID:	15293
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	166
Number of Exceedances:	32
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed National Estuarine Research Reserve Monitoring Program (R3_ESNERR) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 32 of 166 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Field Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 2006 Final Data File used for assessment: ESNERR (Elkhorn Slough National Reserve) Water Quality Data from 94-04
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon.

	Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [306MORMLN - Moss Landing Road, North]
Temporal Representation:	Data was collected over the time period 3/5/1991-10/10/2006.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	QAPP was adopted for work conducted since 2005. Prior to 2005 no QAPP was in place and data entry was completed by volunteers. Multiple errors were identified in data and were flagged by RB staff (in communication with Elkhorn Slough Program staff) prior to assessment of data.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41034, Turbidity **Region 3**

Moss Landing Harbor

LOE ID:	13734
Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 9 of 17 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor at Sandholt Rd]
Temporal Representation:	Data was collected over the time period 8/29/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41034, Turbidity **Region 3**

Moss Landing Harbor

LOE ID:	13735

Pollutant:	Turbidity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	17
Number of Exceedances:	9
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed Central Coast Watershed Studies (R3_CCOWS) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 9 of 17 samples exceed the criterion for Turbidity(NTU).
Data Reference:	Final Data File used for assessment: CCoWS (Central Coast Watershed Studies) Water Quality Data
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Sigler et al. (1984) states that turbidities of 25 NTU's or greater caused reduction in juvenile salmonid growth due to interference with their ability to find food.
Guideline Reference:	Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor at Sandholt Rd]
Temporal Representation:	Data was collected over the time period 8/29/2002-10/21/2003.
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	Data quality is good and Standard Operating Procedures are well documented in QAPP. However, data documentation is poor and replicate samples and other quality assurance measurements are not consistently documented in this data set.
QAPP Information Reference(s):	

DECISION ID	**42134**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Arsenic**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. One out of one shellfish tissue samples exceeded the evaluation guideline. Two out of two fish tissue samples exceeded the evaluation guideline. Zero out of six sediment samples exceeded the evaluation guideline. For the sediment matrix, this sample size is insufficient to determine, with the power and

confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.

2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. Two out of two tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 42134, Arsenic **Region 3**

Moss Landing Harbor

LOE ID:	15624
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing

	Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42134, Arsenic **Region 3**

Moss Landing Harbor

LOE ID:	15625
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Arsenic.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for arsenic is 33 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42134, Arsenic **Region 3**

Moss Landing Harbor

LOE ID:	55439
Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Ten percent of the total arsenic result was used to estimate of the amount of inorganic arsenic in the sample; this number was screened against the guideline. The three replicates were averaged prior to assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in shellfish tissue is 0.0052 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 42134, Arsenic **Region 3**

Moss Landing Harbor

LOE ID:	55440

Pollutant:	Arsenic
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Arsenic. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for arsenic in fish tissue is 0.0034 ppm. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Klasing, S., and R. Brodberg, 2008; OEHHA, 2004)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene Air Toxics Hotspots Program Risk Assessment Guidelines. Part ll Technical Support Document for Describing Available Cancer Potency Values.
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **49746** **Region 3**

Moss Landing Harbor

Pollutant:	**DDT (Dichlorodiphenyltrichloroethane)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or	Pollutant

Pollution:

Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 of the Listing Policy. Under section 3.6, two lines of evidence are necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two out of two shellfish tissue samples exceeded the evaluation guideline.The single fish tissue sample exceeded the evaluation guideline applied to protect the commercial beneficial use. The same single fish tissue sample does not exceed the evaluation guideline when applied to the cold and warm water habitat beneficial uses. For the cold and warm water habitat beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of two shellfish tissue samples exceeded the evaluation guideline. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49746, DDT (Dichlorodiphenyltrichloroethane) **Region 3**

Moss Landing Harbor

LOE ID:	55424
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP

Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in shellfish tissue is 23 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49746, DDT (Dichlorodiphenyltrichloroethane) Region 3

Moss Landing Harbor

LOE ID:	55433
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for DDT, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for total DDT in fish tissue is 15 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49746, DDT (Dichlorodiphenyltrichloroethane) Region 3

Moss Landing Harbor

LOE ID:	55432
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency

Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49746, DDT (Dichlorodiphenyltrichloroethane) Region 3

Moss Landing Harbor

LOE ID:	55431
Pollutant:	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for DDT, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. Total DDT was calculated as the sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total DDT concentration of 1000 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID	41900	Region 3
Moss Landing Harbor		

Pollutant:	**Dieldrin**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.5, a single line of evidence is necessary to assess listing status. Under section 3.6, two lines of evidence are necessary to assess listing status. Six lines of evidence are available in the administrative record to assess this pollutant. Two out of two shellfish tissue samples exceeded the evaluation guideline. One fish tissue sample exceeded the evaluation guideline applied to protect the commercial beneficial use. The single fish tissue sample, when applied to the cold and warm habitat evaluation guideline to protect these beneficial uses, did not exceed. Zero out of six sediment samples exceeded the evaluation guideline. For the sediment samples and for the cold and warm habitat, and commercial beneficial uses, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of two shellfish tissue samples exceeded the evaluation guideline applied to protect for shellfish harvesting beneficial uses and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 41900, Dieldrin	**Region 3**
Moss Landing Harbor	

LOE ID:	55340
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet

Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples exceeded the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in shellfish tissue is 0.49 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41900, Dieldrin **Region 3**

Moss Landing Harbor

LOE ID:	55346
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1

Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for Dieldrin. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for dieldrin in fish tissue is 0.32 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41900, Dieldrin **Region 3**

Moss Landing Harbor

LOE ID:	55345
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41900, Dieldrin **Region 3**

Moss Landing Harbor

LOE ID:	55344
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for Dieldrin. One composite (39 fish per composite) was generated from one species: speckled sanddab. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum Dieldrin concentration of 100 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.

Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 41900, Dieldrin **Region 3**

Moss Landing Harbor

LOE ID:	16693
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41900, Dieldrin — Region 3

Moss Landing Harbor

LOE ID:	16694
Pollutant:	Dieldrin
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Dieldrin.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for dieldrin is 61.8 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 49739 — Region 3

Moss Landing Harbor

Pollutant:	**PCBs (Polychlorinated biphenyls)**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status	Revised
Sources:	Source Unknown
Expected TMDL Completion Date:	2027

Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.5 of the Listing Policy. Under section 3.5, one line of evidence is necessary to assess listing status. Four lines of evidence are available in the administrative record to assess this pollutant. Two out of two shellfish tissue samples exceeded the evaluation guideline. The single fish tissue samples exceeded the evaluation guideline applied to protect for the commercial beneficial use. When the single fish tissue sample is applied to the cold and warm water habitat evaluation guideline the sample does not exceed the guideline. For cold and warm water fish tissue samples only, this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification for placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two out of two shellfish tissue samples exceeded the evaluation guidelines. This exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Line of Evidence (LOE) for Decision ID 49739, PCBs (Polychlorinated biphenyls) **Region 3**

Moss Landing Harbor

LOE ID:	55411
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Shellfish Harvesting
Number of Samples:	2
Number of Exceedances:	2
Data and Information Type:	Shellfish surveys
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: The two samples did exceed the guideline. Each sample consisted of 45 California mussels. Data were reported on a dry weight basis and were converted to a wet weight basis by multiplying the dry-weight concentration by a factor of 1 minus the percentage of moisture content expressed as a decimal. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in shellfish tissue is 3.9 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 21 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. (Brodberg, R.K., and G.A. Pollock, 1999; Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Prevalence of Selected Target Chemical Contaminants in Sport Fish From Two California Lakes: Public health designed screening study. Sacramento, CA: Office of Environmental Health Hazard Assessment Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	The samples were collected from stations 306MSLG26 and 309MSLG04. Mussels were deployed at one station in the back of the harbor and one station at the front (or most seaward) portion of the harbor within the waterbody.
Temporal Representation:	Mussels were deployed February 17-19, 2004 and retrieved June 21-25, 2004.
Environmental Conditions:	
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49739, PCBs (Polychlorinated biphenyls) Region 3

Moss Landing Harbor

LOE ID:	55416
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Cold Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce

	detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49739, PCBs (Polychlorinated biphenyls) Region 3

Moss Landing Harbor

LOE ID:	55415
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	1
Number of Exceedances:	0
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 1 samples exceed the criterion for PCB, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	National Academy of Science guidelines (NAS 1972) establish a maximum total PCB concentration of 500 ug/Kg (wet weight) in tissue samples for protection of aquatic life from bioaccumulation of toxic substances.
Guideline Reference:	National Academy of Sciences. Water Quality Criteria 1972. EPA-R3-73-033. Washington, D.C.: U.S. Environmental Protection Agency
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1

	location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

Line of Evidence (LOE) for Decision ID 49739, PCBs (Polychlorinated biphenyls) **Region 3**

Moss Landing Harbor

LOE ID:	55417
Pollutant:	PCBs (Polychlorinated biphenyls)
LOE Subgroup:	Pollutant-Tissue
Matrix:	Tissue
Fraction:	Fish fillet
Beneficial Use:	Commercial or recreational collection of fish, shellfish, or organisms
Number of Samples:	1
Number of Exceedances:	1
Data and Information Type:	Fish tissue analysis
Data Used to Assess Water Quality:	Water Board staff assessed Region 3 Harbor Study Project data for Moss Landing Harbor to determine beneficial use support and results are as follows: 1 of 1 samples exceed the criterion for PCB, Total. One composite (39 fish per composite) was generated from one species: speckled sanddab. Total PCB was assessed for as follows: PCB aroclors and congeners were summed separately and the sum that yielded the highest value was used for the assessment. The flatfish from each station were composited whole body and homogenized into 1 sample.
Data Reference:	Harbor Study 2004 Environmental condition of water, sediment, and tissue quality in Central Coast harbors
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	Water Quality Control Plan for the Central Coastal Basin (2011): All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan for the Central Coastal Basin
Evaluation Guideline:	The modified OEHHA Fish Contaminant Goal for polychlorinated biphenyls in fish tissue is 2.6 ppb. This screening level assumes an average body weight of 70 kg and a consumption rate of 32 g/day for a 30 year exposure over a 70-year lifetime. This constituent is a carcinogen therefore the risk level is set to one in a million. A cooking reduction factor of 1 is applied for skin-off fillets. (Klasing, S., and R. Brodberg, 2008)
Guideline Reference:	Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 1 monitoring site [Moss Landing Harbor random site 26 - 306MSLG26]. Samples were collected from 1 location.
Temporal Representation:	Data was collected on a single day 6/23/2004.
Environmental Conditions:	Staff is not aware of any special conditions that might affect interpretation of the data.
QAPP Information:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002.
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP.

DECISION ID	42131	Region 3
Moss Landing Harbor		

Pollutant:	**Anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42131, Anthracene	Region 3
Moss Landing Harbor	

LOE ID:	15812
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING

Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42131, Anthracene **Region 3**

Moss Landing Harbor

LOE ID:	15813
Pollutant:	Anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for

	anthracene is 845 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42240** **Region 3**

Moss Landing Harbor

Pollutant:	**Benzo(a)anthracene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42240, Benzo(a)anthracene **Region 3**

Moss Landing Harbor

LOE ID:	15692
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42240, Benzo(a)anthracene **Region 3**

Moss Landing Harbor

LOE ID:	15691
Pollutant:	Benzo(a)anthracene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0

Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)anthracene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)anthracene is 1050 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42135	Region 3
Moss Landing Harbor		

Pollutant:	**Benzo(a)pyrene (3,4-Benzopyrene -7-d)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.

3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42135, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Moss Landing Harbor

LOE ID:	15560
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42135, Benzo(a)pyrene (3,4-Benzopyrene -7-d) **Region 3**

Moss Landing Harbor

LOE ID:	15561
Pollutant:	Benzo(a)pyrene (3,4-Benzopyrene -7-d)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Benzo(a)pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Benzo(a)Pyrene is 1450 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42151** **Region 3**

Moss Landing Harbor

Pollutant:	**Chromium**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of

the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42151, Chromium **Region 3**

Moss Landing Harbor

LOE ID:	16068
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42151, Chromium **Region 3**

Moss Landing Harbor

LOE ID:	16055
Pollutant:	Chromium (total)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chromium.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for chromium is 111 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	42089	Region 3
Moss Landing Harbor		

Pollutant:	**Chrysene (C1-C4)**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42089, Chrysene (C1-C4)	**Region 3**
Moss Landing Harbor	

LOE ID:	15949
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chrysene.

Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42089, Chrysene (C1-C4) **Region 3**

Moss Landing Harbor

LOE ID:	15948
Pollutant:	Chrysene (C1-C4)
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Chrysene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Chrysene is 1290 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413

Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42140** **Region 3**

Moss Landing Harbor

Pollutant:	**Copper**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42140, Copper **Region 3**

Moss Landing Harbor

LOE ID:	16019

Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42140, Copper **Region 3**

Moss Landing Harbor

LOE ID:	16032
Pollutant:	Copper
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as

	follows: 0 of 6 samples exceed the criterion for Copper.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for cooper is 149 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42107**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Fluoranthene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6, two lines of evidence are necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant. Zero out of six sediment samples exceeded the evaluation guideline. This sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is supported using table 3.1. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Zero out of six sediment samples exceeded the evaluation guideline. This does not exceed the

allowable frequency listed in Table 3.1 of the Listing Policy.

4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42107, Fluoranthene **Region 3**

Moss Landing Harbor

LOE ID:	16392
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42107, Fluoranthene **Region 3**

Moss Landing Harbor

LOE ID:	16405
Pollutant:	Fluoranthene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluoranthene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Fluoranthene is 2,230 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42102**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Fluorene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with

sediment toxicity to justify adding that pollutant to the CWA section 303(d) List.

Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42102, Fluorene **Region 3**

Moss Landing Harbor

LOE ID:	16474
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 -

	Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42102, Fluorene **Region 3**

Moss Landing Harbor

LOE ID:	16473
Pollutant:	Fluorene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Fluorene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for fluorene is 536 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42155** **Region 3**

Moss Landing Harbor

Pollutant:	**Lead**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42155, Lead — Region 3

Moss Landing Harbor

LOE ID:	17354
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42155, Lead **Region 3**

Moss Landing Harbor

LOE ID:	17355
Pollutant:	Lead
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Lead.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for lead is 128 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [

	309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **40943** **Region 3**

Moss Landing Harbor

Pollutant:	**Naphthalene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 40943, Naphthalene **Region 3**

Moss Landing Harbor

LOE ID:	17241
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment

Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 40943, Naphthalene **Region 3**

Moss Landing Harbor

LOE ID:	17254
Pollutant:	Naphthalene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Naphthalene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06

SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for naphthalene is 561 ug/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**41111**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Phenanthrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available

	indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41111, Phenanthrene **Region 3**

Moss Landing Harbor

LOE ID:	16921
Pollutant:	Phenanthrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41111, Phenanthrene **Region 3**

Moss Landing Harbor

LOE ID:	16907
Pollutant:	Phenanthrene

LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Phenanthrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Phenanthrene is 1170 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID	**42176**	**Region 3**
Moss Landing Harbor		

Pollutant:	**Pyrene**
Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6

samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

Regional Board Staff Decision Recommendation: This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42176, Pyrene **Region 3**

Moss Landing Harbor

LOE ID:	17041
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring

	includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42176, Pyrene **Region 3**

Moss Landing Harbor

LOE ID:	17054
Pollutant:	Pyrene
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Pyrene.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for Pyrene is 1520 ug/Kg dry weight (Macdonald et al. 2000)
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID **42177** **Region 3**

Moss Landing Harbor

Pollutant: **Zinc**

Final Listing Decision:	**Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	Do Not List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Two lines of evidence are available in the administrative record to assess this pollutant. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the 6 samples exceed the Evaluation Guideline (MacDonald et al. 2000) as it applies to aquatic life beneficial uses and this sample size is insufficient to determine, with the power and confidence of the Listing Policy, the applicable beneficial use support rating. A minimum of 16 samples is needed to determine if a beneficial use is fully supported using Table 3.1. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 42177, Zinc **Region 3**

Moss Landing Harbor

LOE ID:	17949
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 42177, Zinc **Region 3**

Moss Landing Harbor

LOE ID:	17950
Pollutant:	Zinc
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 0 of 6 samples exceed the criterion for Zinc.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for zinc is 459 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]

Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 34526 Region 3

Moss Landing Harbor

Pollutant:	**Indicator Bacteria**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This decision was made prior to 2006 and the supporting documentation is not held in this assessment database. The Regional Boards will update this decision when new data and information become available and are assessed. The pollutant name has been changed from 'pathogens' to 'indicator bacteria'.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34526, Indicator Bacteria Region 3

Moss Landing Harbor

LOE ID:	3968
Pollutant:	Pathogens
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Water Contact Recreation
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified

Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID 41599 Region 3

Moss Landing Harbor

Pollutant:	**Nickel**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	No new data are assessed. This decision has not changed from the 2010 listing cycle. This pollutant is being considered for placement on the CWA section 303(d) List under section 3.6 of the Listing Policy. Under section 3.6 at least two lines of evidence are necessary to assess listing status for pollutants in sediment, and pollutant concentrations in sediment must be associated with sediment toxicity to justify adding that pollutant to the CWA section 303(d) List. Four lines of evidence (LOEs) are available in the administrative record to assess these water segment-pollutant combinations. Two LOEs are available in the administrative record to assess Nickel concentrations and Two LOEs are available in the administrative record to assess sediment toxicity. Two of the 6 samples were toxic to test organisms and two of the 6 samples exceed the probable effects level (predictive of sediment toxicity) for nickel (MacDonald et al. 2000). The two sites located within the boat dock area of the Marina were both toxic to invertebrates and had levels of nickel that exceed the evaluation guideline. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 6 samples exceed the probable effects level (predictive of sediment toxicity) for nickel (MacDonald et al. 2000) and sediment toxicity is also present in Moss Landing Harbor. Therefore, this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41599, Nickel Region 3

Moss Landing Harbor

LOE ID:	17077

Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41599, Nickel **Region 3**

Moss Landing Harbor

LOE ID:	23907
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as

	follows: 2 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41599, Nickel **Region 3**

Moss Landing Harbor

LOE ID:	17076
Pollutant:	Nickel
LOE Subgroup:	Pollutant-Sediment
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Nickel.
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to,

	or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (Water Quality Control Plan, Central Coast Basin, General Objective Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	In fresh water sediments the probable effects level (predictive of sediment toxicity) for nickel is 48.6 mg/Kg dry weight (MacDonald et al. 2000).
Guideline Reference:	Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls. Environmental Toxicology and Chemistry. 19(5): 1403-1413
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41599, Nickel **Region 3**

Moss Landing Harbor

LOE ID:	23908
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.

Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

DECISION ID 34528 Region 3

Moss Landing Harbor

Pollutant:	**Sedimentation/Siltation**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2027
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 34528, Sedimentation/Siltation Region 3

Moss Landing Harbor

LOE ID:	3970
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Estuarine Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	Not Specified
Data Used to Assess Water Quality:	Unspecified--This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
Data Reference:	Placeholder reference pre-2006 303(d)
SWAMP Data:	Non-SWAMP

Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	

DECISION ID **41598** **Region 3**

Moss Landing Harbor

Pollutant:	**Toxicity**
Final Listing Decision:	**List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision:	List on 303(d) list (TMDL required list)(2012)
Revision Status	Original
Sources:	Source Unknown
Expected TMDL Completion Date:	2023
Impairment from Pollutant or Pollution:	Pollutant
Regional Board Staff Conclusion:	This pollutant is being considered for placement on the section 303(d) list under section 3.1 and section 3.6 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant in sediment samples. Two lines of evidence are available in the administrative record to assess this pollutant. One sample can have multiple toxicity test results but will be counted only once. One sample is defined as being collected on the same day and time at the same location. Two LOEs summarize sediment samples. Six sediment samples are summarized in LOEs using the test organism as the pollutant (i.e. invertebrate toxicity).Two of the six sediment samples resulted in a significant toxic effect to one or more test organisms and therefore exceeds the water quality objective for aquatic life protection. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the 6 sediment samples were toxic to invertebrate test organisms and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
Regional Board Staff Decision Recommendation:	This is a decision previously approved by the State Water Resources Control Board and the USEPA. No new data were assessed by the Regional Board for the current cycle. The decision has not changed.

Line of Evidence (LOE) for Decision ID 41598, Toxicity **Region 3**

Moss Landing Harbor

LOE ID:	23907
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Cold Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	

Line of Evidence (LOE) for Decision ID 41598, Toxicity **Region 3**

Moss Landing Harbor

LOE ID:	23908
Pollutant:	Invertebrate Toxicity
LOE Subgroup:	Toxicity
Matrix:	Sediment

Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Aquatic Life Use:	Warm Freshwater Habitat
Number of Samples:	6
Number of Exceedances:	2
Data and Information Type:	TOXICITY TESTING
Data Used to Assess Water Quality:	Central Coast Regional Board Staff assessed CCAMP_SWAMP Monitoring (02SW3001) data for Moss Landing Harbor to determine beneficial use support and results are as follows: 2 of 6 samples exceed the criterion for Toxicity, Amphipod 10-d Survival in Salt Water Sediments(Eohaustorius). Toxicity is defined by SWAMP (2004) as follows: Significant toxicity in the survival endpoint when compared to the negative control based on a statistical test with alpha of less than 5%, and less than the evaluation threshold (both criteria are met).
Data Reference:	Final Data File used for assessment: SWAMP Toxicity Data 2001-06
SWAMP Data:	SWAMP
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board (Water Quality Control Plan, Central Coast Basin, Chapter III, Section II.A.2 Objectives for all Inland Surface Waters, Enclosed Bays and Estuaries).
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - Central Coast Region (Region 3)
Evaluation Guideline:	Significant reduction of survival of test organism relative to the control (alpha < 0.05) and test organism survival is 20% less than the control survival.
Guideline Reference:	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)
Spatial Representation:	Data for this line of evidence for Moss Landing Harbor was collected at 6 monitoring sites [309MSLG04 - Moss Landing Harbor, 309MSLG30 - Moss Landing Harbor, 306MSLG26 - Moss Landing Harbor, 306MSLG06 - Moss Landing Harbor, 306MSLG14 - Moss Landing Harbor, 306MSLG22 - Moss Landing Harbor]
Temporal Representation:	Data was collected over the time period 6/23/2004-6/24/2004. SWAMP toxicity monitoring includes both water samples (collected in both winter and summer) and sediment samples (collected in spring).
Environmental Conditions:	Staff is not aware of any special conditions that might effect interpretation of the data.
QAPP Information:	All data was collected following the Standard Operating Procedures and Data Quality Objectives outlined in the SWAMP QAMP, (Puckett, 2002). QA data are included in submission. All data are flagged as appropriate.
QAPP Information Reference(s):	